Economic Commission for Europe

Committee on Environmental Policy

Twenty-seventh session
Geneva, 3–5 November 2021
Item 4 (b) of the provisional agenda
Ninth Environment for Europe Ministerial Conference:
Background thematic documents

Information paper No.3
5 October 2021

Draft thematic document for the Ninth Environment for Europe Ministerial Conference: Applying principles of circular economy to sustainable tourism

Summary

At its twenty-sixth session, (Geneva and online, 9 and 10 November 2020), the Economic Commission for Europe (ECE) Committee on Environmental Policy considered draft outlines of two background thematic documents on the themes for the Ninth Environment for Europe Ministerial Conference and asked:

- The Committee members to make concrete suggestions and proposals on draft outlines of two background thematic documents on the themes for the Ninth Environment for Europe Ministerial Conference and send them to the secretariat by the end of 2020.

- The Bureau, with support from the secretariat and in cooperation with relevant stakeholders, to continue working to prepare, for the next regular session of the Committee, the first drafts of the two background thematic documents.

Following the call by the Committee at its twenty-sixth session, the secretariat received suggestions and proposals on draft outlines from Czechia, the Russian Federation, Spain, Sweden and the European Investment Bank.

The consultant contracted by the United Nations Environment Programme (UNEP) prepared an information note on the current key principles, policies and approaches of green and circular economy in the two thematic areas – sustainable infrastructure and sustainable tourism – with the view to further elaboration into the background thematic documents. The Bureau discussed the information note at its virtual meeting on 2 June 2021 and guided the consultant and the secretariat on the next steps in finalising it.

The Bureau at its virtual meeting on 20 September took note of the final version of the information note (finalized by the consultant based on the comments and inputs received from the Bureau members during and after the meeting on 2 June 2021) and asked the secretariat to split and convert the information note into the format of first drafts of the two thematic background documents and submit them as information papers for the twenty-seventh session of the Committee on Environmental Policy.

The Committee will be invited to consider the first draft of this background thematic document, to decide on the next steps and to provide guidance on developing further the thematic document with a view of its submission as an official document for the Special Session of the Committee on Environmental Policy (to be held in Geneva on 9-12 May 2022).

Contents

Annexes

Figures

Tables

Boxes

Introduction: setting the scene

Driving forces for sustainable tourism

1. After decades of sustained growth, tourism is now considered one of the leading global growth industries and one with significantly increasing traveller flows in modern society. Over time, an ever-increasing number of destinations have opened up their economies and invested in tourism development, turning the local industry into a key driver of socio-economic progress through the creation of jobs and enterprises, infrastructure development and the export revenues earned. Global tourism has experienced a steady growth for over six decades, culminating in an estimated 1.2 billion arrivals in 2016. Global expenditures on travel more than doubled between 2000 and 2016, rising from USD 495 billion to USD 1.2 trillion and accounting for 7% of global exports in goods and services.[1]

2. Major investors including mostly private tourism investors have not specifically prioritized environmental and social sustainability considerations into their decision-making. In fact, decision-making criteria and models traditionally utilized are still based on conventional metrics (e.g. Return on Investment) and linear business models that do not take sustainability factors into account. However, sustainability in the tourism sector and overall a shift from linear to circular models[2] are becoming increasingly important for governments and businesses due to different environmental, economic and social factors. From an environmental standpoint some of the key motives for this shift are nature protection, reduction of pollution and climate targets. Resource efficiency is likewise an important economic driver for the implementation of circular principles, while new consumer trends and concerns are social motivations to follow more sustainable approaches. According to OECD, four megatrends are likely to have significant impacts and relevance for tourism: Evolving visitor demand; sustainable tourism growth; enabling technologies; and travel mobility. Exploring the implications of circularity to these megatrends are important to shape the future of tourism policies and practices.[3]

3. Climate change is a central aspect for the promotion of circularity in the tourism sector. According to United Nations World Tourism Organization (UNWTO) and the International Transport Forum (ITF) emissions from tourism may increase at least by 25% by 2030.[4] The UNEP/ UNWTO Green Economy report states that in a 'business-as-usual' scenario, tourism would see an increase of 154% in energy consumption, 131% in greenhouse gas emissions, 152% in water consumption and 251% in solid waste disposal by 2050.[5] Tourism has therefore contributed to climate change, and now the counter-effects are affecting negatively the sector. For instance, tourism is highly vulnerable to climate change, as extreme weather events, loss of biodiversity and damages to assets can lead to increasing insurance costs and safety concerns. The Paris Agreement and the 2030 Agenda for Sustainable Development provide the landmark to counteract the effects of climate change.[6] The UN Climate Change Conference COP26 summit in this regard will help bring actions towards

---

[1] OECD, https://www.oecd-ilibrary.org/docserver/tour-2018-6-en.pdf?expires=1624883544&id=id&accname=guest&checksum=A7CE9166782DF58441310E4B389A2368

[2] Circular models keep materials at the highest possible value along the value chain. Circularity needs to be inclusive not only for the conservation of the environment but also to promote the well-being for all, UNEP, https://buildingcircularity.org/

[3] OECD, https://www.oecd-ilibrary.org/docserver/tour-2018-6-en.pdf?expires=1624883544&id=id&accname=guest&checksum=A7CE9166782DF58441310E4B389A2368

[4] UNWTO, https://www.unwto.org/sustainable-development/climate-action

[5] https://www.greenindustryplatform.org/blog/why-sustainable-tourism-matters

[6] UNWTO, https://www.e-unwto.org/doi/epdf/10.18111/9789284416660

the goals of the Paris Agreement and the UN Framework Convention on Climate Change (UNFCCC).[7]

4. In this context, the 10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP) adopted in 2020 serves as the global commitment to accelerate the shift towards sustainable consumption and production in both developed and developing countries. The One Planet Network implements the commitment of the 10YFP. It is a multi-stakeholder partnership for sustainable development, generating collective impact through its six programmes. One of these programmes is focused on tourism, enhancing the opportunity to promote sustainable tourism and especially implement circular models in the sector.[8]

Tourism and the COVID-19 pandemic

5. The COVID-19 virus has exacerbated the existing climate change issues and has become one of the most acute threats to the global travel and tourism industry. Within countries, the virus affected virtually all parts of the hospitality value chain. In 2020, international arrivals dropped by 74%, representing an estimated loss of USD 1.3. trillion in export revenues and around 120 million direct jobs at risk.[9] Several economies in the pan-European region are in particular highly vulnerable to broad disruptions in global tourism, since revenues from the sector range from 5 to even 30% of GDP in most countries. Countries like Georgia, Albania, Croatia, Montenegro, Cyprus, Greece, Italy and Spain are especially affected by the contraction in the sector.[10]

6. The impact of cancelled events, closed accommodations, and shut down of attractions affected other aspects of the supply chain, such as food production, catering and laundry services, among others. The tourism economy is now at a standstill in many countries and recovery is expected to be gradual. Containment measures are likely to continue in many countries over the coming months or years.

7. A recovery of the sector must be anchored on sustainability (people, planet, prosperity) to underpin resilience. In December 2020, the United Nations General Assembly acknowledged tourism among the economic sectors hardest hit by COVID-19, stressing that the challenges require comprehensive solutions and international collaboration which contribute to strengthening policies and the financial support needed to sustain the livelihoods dependent on the sector.[11]

8. To this end, UNWTO is leading the "One Planet Vision for the Responsible Recovery of the Tourism Sector" programme calling for a responsible recovery in the tourism sector, which is founded on sustainability, to build back better.[12]

9. To accomplish the goal to build a sustainable tourism sector, circular economy approaches are required. Besides the One Planet Network, the G20 welcomed UNWTO's recommendations for tourism's green transformation. Common harmonized criteria for the easing of travel restrictions and increased investment in systems that support safe travel are among the main key aspects to achieve greater sustainability and resilience.[13]

---

[7] https://2nsbq1gn1rl23zol93eyrccj-wpengine.netdna-ssl.com/wp-content/uploads/2021/07/COP26-Explained.pdf
[8] https://www.oneplanetnetwork.org/who-we-are
[9] UNWTO, https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2021-05/210504-Recommendations-for-the-Transition-to-a-Green-Travel-and-Tourism-Economy.pdf?wiwmhlGgXT4zwXles_Q8ycdITGIQfaMt
[10] EBRD, Regional Economic Prospects May 2020
[11] UN, https://undocs.org/en/A/RES/75/229
[12] UNWTO, https://www.unwto.org/covid-19-oneplanet-responsible-recovery
[13] UNWTO, https://www.unwto.org/news/g20-ministers-welcome-unwto-recommendations-for-tourism-s-green-transformation

Tourism and effects on sustainability dimensions

Economic pressures

10. Prior to the pandemic, travel & tourism (including its direct, indirect and induced impacts) accounted for 1 in 4 of all new jobs created across the world, 10.6% of all jobs (334 million), and 10.4% of global GDP (USD 9.2 trillion). Meanwhile, international visitor spending amounted to USD 1.7 trillion in 2019 (6.8% of total exports, 27.4% of global services exports).[14] However, since the COVID-19 crisis started and borders closed, hotels shut and air travel dropped dramatically. International tourist arrivals have fallen from almost 1.5 billion in 2019 to around 380 million in 2020, which represents a 74% decline. This represents a loss of an estimated USD 1.3 trillion in international tourism expenditure.[15]

11. According to estimates by the World Bank, GDP growth in Europe and Central Asia was expected to contract by -4.7 % in 2020, mainly associated with disruptions to services and supply chains, and with a more significant impact on economies that depend heavily on tourism, commodity exports, capital inflows, and integrated value chain activities.[16]

Environmental pressures

12. Many environmental impacts of tourism operations are linked to the construction and management of infrastructure such as roads, ports and airports, and tourism facilities (e.g. resorts, hotels, restaurants, shops, golf courses, and marinas). Tourism development and poorly managed facilities have led to soil erosion, increased air, soil and marine pollution, natural habitat loss, and increased pressure on endangered species, among other impacts. The rapid growth in both international and domestic travel, the increasing trend to travel further distances over shorter periods of time, and the preference for energy-intensive transportation modes, accommodation, and activities, have increased the energy dependency of tourism and the sector's contribution to climate change. Tourism now accounts for 4.5 GtCO2-eq per year and is widely considered to be one of the fastest growing economic sectors.[17]

13. Emissions of greenhouse gases directly and indirectly affect marine and coastal ecosystems through increasing water temperatures (resulting in coral bleaching), ocean acidification, and sea level rise. Other challenges include tourism's high rates of water consumption, discharges of untreated wastewater, generation of solid waste, plastic pollution, land use changes, spread of invasive species and disease outbreaks, pressures on marine and terrestrial ecosystems, and biodiversity loss. Findings of the "2011 Green Economy Report" highlighted the enormous potential of the sector in the preservation of biodiversity (benefit/cost ratio of 3 to 75). This high ratio is not seen in any other economic sector and offers a huge opportunity for reducing biodiversity loss. However, COVID-19 and the subsequent closure of natural protected areas has had a destructive impact on wildlife and the communities that protect it. Those negative impacts on conservation of natural protected areas and livelihoods will be particularly felt in Small-island Development States (SIDs), Least Developed Countries (LDCs) and tourism dependent countries, if finance is not mobilized to support the recovery of the sector. Many protected areas use the

---

[14] World Travel and Tourism Council (WTTC), https://wttc.org/Research/Economic-Impact
[15] UN, https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa_vol3.pdf
[16] World Bank, https://pubdocs.worldbank.org/en/825681588788164258/Global-Economic-Prospects-June-2020-Analysis-ECA.pdf
[17] UNWTO, 2017

income generated from tourism to fund law enforcement, conservation, and staff salaries.[18]

14. Moreover, this reality is even harder when tourism is concentrated in one season only, like winter or summer. For example, seasonal pressures cause stress into waste management systems, as the generated solid waste's mass and volume flow are totally season dependent. Resource availability to local communities (e.g. water or energy) is also affected by tourism concentration in peak seasons.

15. Coastal and beach tourism is one of the top three marine litters sources in the North, Mediterranean and Baltic seas. Tourism activities are also directly impacted by marine plastics as they deteriorate destinations. However, there are fewer examples of tourism businesses engaging all relevant stakeholders in value chain activities that are critical to environmental protection. For instance, in the case of plastics it is important to involve plastic producers, retailers, packaging and transport companies, as well as recyclers to reduce plastic waste along the entire value chain. Value chain approaches enable the identification and assessment of innovative sustainable solutions – based on life-cycle thinking – such as the use of extended producer responsibility or deposit refund schemes. These innovative solutions contribute to not only replace single-use plastic items, but also other products containing plastics such as construction materials, food packaging, electrical appliances and furniture.

16. Nevertheless, tourism has the potential to contribute to environmental protection and address environmental concerns while supporting economic activities. This can be done by capitalizing on natural and biodiversity assets to increase appreciation of visitors, and by spreading awareness of the benefits of conservation. In addition, because of their high tourism potential, the impetus to legally protect many natural areas has seen significant growth.

Social and cultural pressures

17. Culture is a central aspect for tourism development in both urban and rural areas. Some socio-cultural benefits of tourism can include poverty reduction, integration, empowerment and income generation for women, rural communities, indigenous peoples and many other historically marginalized populations. Additionally, the sociocultural value of tourism may include a great sense of community identity, a heightened sense of engagement with local environments, and increased social capital following an increase in tourists. In contrast, tourism development may have negative consequences such as changes in values of local communities, damage to world heritage sites, and in some instances, social security problems and demographic changes that could lead to job losses.[19] The global pandemic exacerbated negative socio-economic impacts.

18. Cultural tourism in the pan-European region is a key aspect for leisure and social development, but it has been negatively impacted by the pandemic due to current travel restrictions. For instance, around 7 million cultural and creative jobs in Europe are at risk due to the crisis. Additionally, the social economy and the creative and cultural ecosystems related to tourism were estimated to have a drop in turnover by 70% in the second quarter of 2020 in Europe.[20]

19. UNWTO sees cultural tourism as an important aspect in promoting sustainable and inclusive economic growth, fostering innovation and providing benefits and empowerment for all. Since the COVID-19 pandemic has affected substantially the

[18] UNEP, UNWTO, https://www.e-unwto.org/doi/epdf/10.18111/9789284414529
[19] Xiaoping Zhuang, Yong Yao et. al, Sociocultural Impacts of Tourism on Residents of World Cultural Heritage Sites in China, February 2019.
[20] https://www.europanostra.org/wp-content/uploads/2020/10/20201014_COVID19_Consultation-Paper_EN.pdf

sector, UNWTO has issued the following recommendations to address socio-cultural impacts for an inclusive recovery in the sector: Promoting synergies to strengthen cultural tourism; support culture as a "win-win" for tourism destinations; building a more resilient tourism and culture workforce through digital transformation; harnessing technology to make cultural tourism more competitive; protecting nature to safeguard culture; fostering community-based tourism through living heritage; and fostering a cultural tourism recovery for all.[21]

Trends for Demand and Consumption in the pan-European region

20. *Consumption trends.* Global tourism arrivals have grown by almost 50% since 2010, an average annual growth of over 5%. While tourism growth is projected to continue, key factors like changing demographics, improved connectivity, technological innovations, and the need for sustainable and inclusive approaches are likely to transform the sector by 2040.[22] The tourism industry is thus an important consumer and/or user of materials, energy and other resources. Passenger transport, accommodation, and food and beverage accounted for over half of total internal tourism consumption (domestic and inbound) of OECD countries in 2018.[23] However, prior to the pandemic, all major tourism sector operators were already facing increasing demand-side pressure by visitors and governments to report, account for and reduce their natural and social ecosystem impacts. For instance, in the Pan-European region, sustainable consumption should be promoted, as biodiversity loss and ecosystem degradation are continuing, mainly caused by increased land-use change, agricultural intensification, urbanization and habitat fragmentation.[24] Moreover, the consumption pressures have been exacerbated with the pandemic, not only by tourism operators, but also by travellers due to their preferences towards more green destinations and domestic consumption.[25] For example, in OECD countries, domestic tourism consumption had a share of 75%, while international tourism only amounted to 25% in 2020.[26]

21. *Demand.* Before the pandemic, tourism in the pan-European region was quite dynamic due to the proximity of countries, where operators especially airlines had comprehensive and increasing demands especially in peak seasons. In 2016, Europe at large (both EU and extra-EU) remained the most visited region in the world, accounting for 50% of the world's tourist arrivals and 37% of global tourism receipts.[27] The continent was a great and growing source market for tourism until the start of 2020. It generated 35% of the world's international tourism expenditure.[28] The pandemic has significantly reduced demand and increasing growth in the sector, resulting in economic losses. For instance, the air traffic network as a whole in Europe has declined by 65% in comparison to 2019.[29] This is a challenging aspect for operators, as quarantine measures and sanitary policies imposed by different countries make demands quite unpredictable. Vaccination programmes and increasing sanitary demands will require further efforts by key

[21] UNWTO, https://www.e-unwto.org/doi/pdf/10.18111/9789284422579
[22] OECD, https://www.oecd-ilibrary.org/docserver/6b47b985-en.pdf?expires=1624883508&id=id&accname=guest&checksum=197C934D07E9A2CAFDA1C43C37A4AAA8
[23] OECD, https://www.oecd-ilibrary.org/docserver/6b47b985-en.pdf?expires=1624883508&id=id&accname=guest&checksum=197C934D07E9A2CAFDA1C43C37A4AAA8
[24] UNECE, https://unece.org/fileadmin/DAM/Media_Factsheet_-_GEO-6_Assessment_for_the_pan-European_region_FINAL.pdf
[25] CE360, Alliance Members, https://circulareconomy.europa.eu/platform/sites/default/files/circular-economy-in-travel-and-tourism.pdf
[26] OECD, https://www.oecd.org/cfe/tourism/2020-Tourism-Brochure.pdf
[27] UNWTO, https://www.e-unwto.org/doi/pdf/10.18111/9789284419470
[28] EU, https://www.cbi.eu/market-information/tourism/trade-statistics
[29] Eurocontrol, https://www.eurocontrol.int/publication/eurocontrol-comprehensive-assessment-covid-19s-impact-european-air-traffic

stakeholders in the tourism sector not only in the pan-European region, but also globally. The pace of recovery in the tourism industry is not expected to be the same for all segments. Rural destinations can expect a much faster recovery in comparison to urban destinations, as tourists nowadays would rather travel to outdoor places with a low population density.[30] Domestic and regional travel will be preferred over long-haul destinations in the short-term. For this reason, demands are likely directed towards more sustainable tourism and for the development of alternative strategies (e.g. eco-tourism services), which aim to support locally owned resorts that are run in an equitable and environmentally responsible manner.[31]

I. Tourism and the circular economy: Principles and opportunities

22. Circularity and sustainable consumption and production are essential to attain the SDGs, the Paris Agreement, including as well the Pan-European framework for greening the economy. The world is only 8.6% circular despite its importance for a green economy transition.[32] Circularity principles are essential to a sustainable recovery from the COVID-19 pandemic. UNEP has introduced its circularity approach (See Figure 1) providing the guidance and principles to move from linear to circular business models, which are relevant to infrastructure, but also for tourism, to prevent excessive waste and further negative impacts. Reduce by design is the guiding principle, meaning less use of materials and consumption patterns of the lifecycle of products and services. Refuse, repair, refurbish, remanufacture, reuse, reduce, repurpose and recycle are the related circular processes, applicable to tourists, tourism operators and business, governments, among other key stakeholders in the value chain.[33]

23. While governments and the private sector are increasingly pressured to achieve more sustainable consumption and production patterns, the interlinkages between different pathways and between impact dimensions are highly complex, and involve different subsectors of the tourism system, which in turn rely on their own value chains.

24. Tourism depends on transportation, requires accommodation, and involves in general terms different value-chain activities. Tourists also consume food, and their food choices are fundamentally different from those at home while travelling. Figure 4 provides a detailed overview of aspects of the tourism value chain, showing the wide range of stakeholders involved, as well as the differences in economic impacts related to tourism consumption.

25. Engaging businesses to meet the 2030 Sustainable Development and Climate Agendas can be relevant at different stages of the value chain (transport, accommodation, food and beverages, shopping, arts and performances, etc.). However, not all of these aspects are equally important in terms of their relevance and the intervention areas where tourism businesses can act. Hotspot analysis can help understand interdependencies of the value chain and identify priority issues, the right life cycle stages, and the right actors and resources. Transportation is generally the major aspect determining the climate outcome of tourism activities, followed by accommodation.

[30] EU, https://www.cbi.eu/market-information/tourism/trade-statistics
[31] Europe Parliament,
https://www.europarl.europa.eu/RegData/etudes/STUD/2019/629200/IPOL_STU(2019)629200_EN.pdf
[32] WBCSD, https://docs.wbcsd.org/2020/12/WBCSD-Forest-Sector-SDG-Roadmap-Implementation-Report.pdf
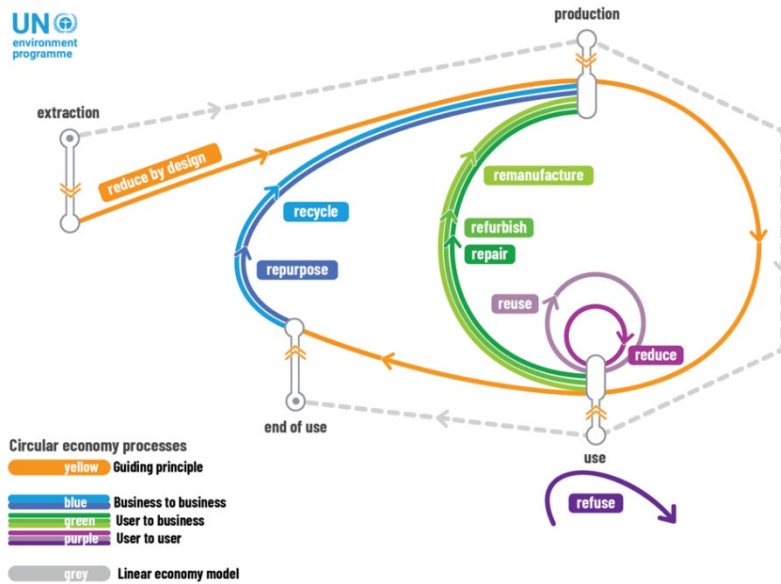[33] UNEP, https://www.unep.org/circularity

Figure 1: UNEP's circularity principle and approach

Applying circular economy in tourism: Value Chain[34] and Hotspots Analysis[35] Approaches
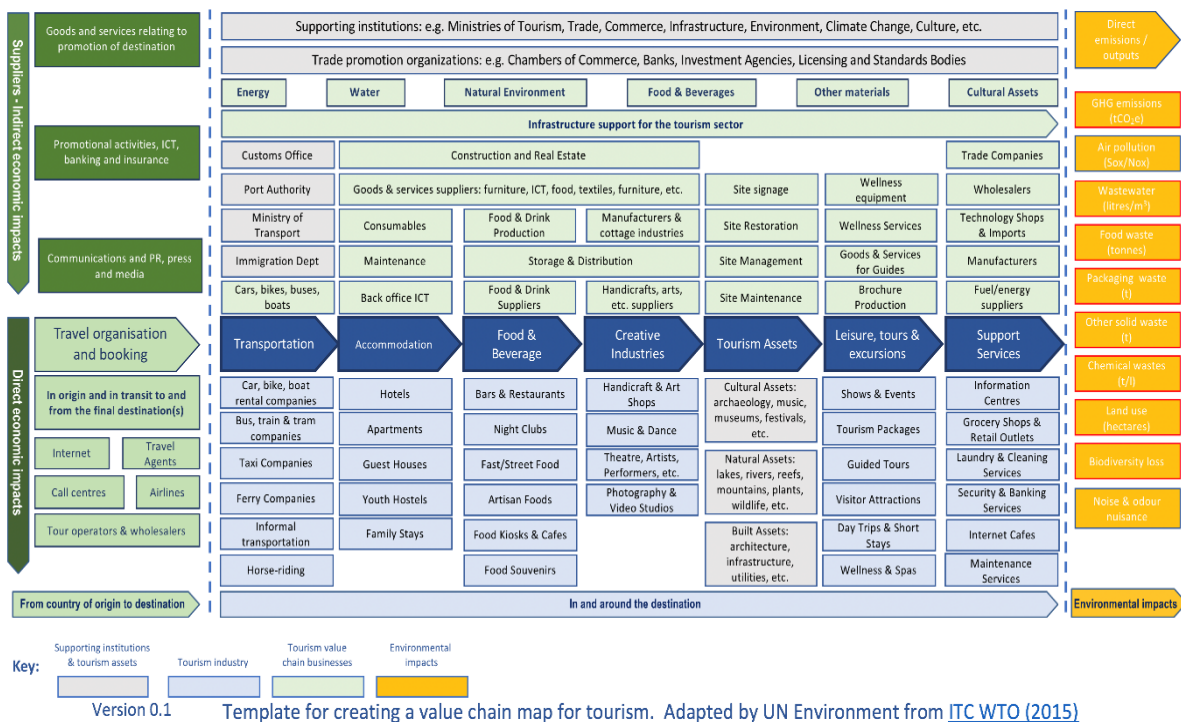

Figure2: Complexity of tourism supply and value chain (Source: UNEP, 2019)

---

[34] Value chain analysis describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. Therefore, it evaluates which value each particular activity adds to the organization's products or services. FAO, http://www.fao.org/fileadmin/user_upload/fisheries/docs/ValueChain.pdf

[35] Hotspot analysis in this context refers to identifying the hotspots areas of unsustainable production and consumption. UNEP released the Sustainable Consumption and Production Hotspots Analysis Tool (SCP-HAT), for the identification of hotspot areas to support setting priorities in national sustainable consumption and production as well as climate policies. UNEP, Sustainable Consumption and Production Hotspots Analysis Tool (SCP-HAT)
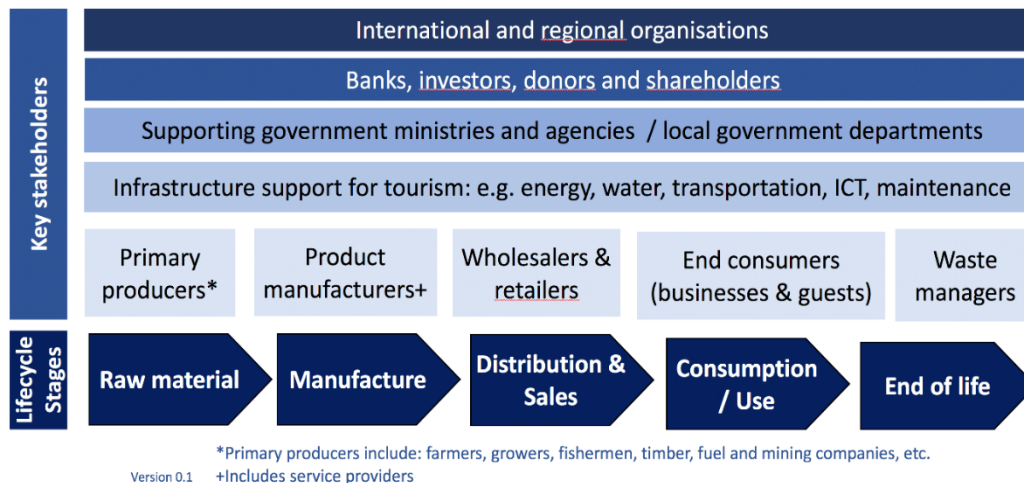
Figure 3: Complexity of tourism supply and value chain (Source: UNEP, 2019)

26. While the application of the value chain approach has led to positive results and sustainable business models in other sectors, it is still incipient within tourism, as a service-oriented sector, which could make good use of the opportunities to replicate and implement existing best practices across its transversal value chain.[36] Especially due to the interlinkages of tourism with other economic activities and the direct interaction it generates between consumers and producers, tourism has the potential to create positive, long-lasting impacts that go well beyond the sector. Therefore, moving away from the classic value chain relations with a focus on linear flows and adapting more systematic circular production patterns that are accelerators for sustainability of the sector, represent a transformation process that is key to the long-term health and resilience of tourism activities, and thus the sector as a whole.

27. Additionally, through this approach the tourism sector strengthens the monitoring of "Sustainable Consumption and Production (SCP) and climate change impact areas" given their connections with the elements of the circular economy, particularly waste reduction,[37] and benefits from the opportunity to advance in addressing additional issues of environmental concern, such as food waste, use of problematic single use products, and therefore positions tourism as an agent for change, triggering positive impact on and beyond the sector, contributing to realize all 17 SDGs and specifically SDG12, and SDG13.

28. The following table shows project implementation examples of circularity principles from both governments and businesses in sectors relevant to tourism. These circularity principles encompass business ideas, programmes, strategies and solutions. These examples could serve as inspiration for potential circular initiatives that are more specific to the tourism sector.

---

[36] Arup and BAM (2017). Circular Business Models for the Built Environment.
[37] European Commission (2018). Monitoring Framework on progress towards a circular economy.

Table 1: Circularity examples in different sectors

Country/Region scope	Sector	Example
Georgia (Municipalities Rustavi and Zestaponi)	Waste management	Georgia conducted a municipal industrial waste mapping exercise, which focuses on outlining the lifecycle of industrial waste, from its very inception at a production site until its final disposal. Industrial waste mapping is a method to quantify and demonstrate the distribution and management of industrial waste within a geographic area. The waste mapping exercise aims to identify, assess, and map the waste streams of the local manufacturing enterprises. Its main goal is to develop options for an improved resource efficiency and introduction of circular economy principles and practices. (This project is conducted under the programme EU4 Environment).[38]
EU (Austria, Belgium, the Netherlands and Germany)	Mobility (Transport)	SUSTAINair is an EU-funded research project that aims to make the entire supply chain ecosystem greener, in line with the Circular Economy Action Plan, and to set new standards for aerospace manufacturing, enabling an increase in cross-sector synergies. The expected impact of these standards is to reduce costs (e.g. 3–10% fuel consumption, 75% in parts replacement) and 100% recyclability of thermoset and thermoplastic FRPs[39]
Global	Water and Waste Management	WBCSD is developing a roadmap for reducing ocean waste through business cases for on-land solutions addressing the prevention of plastic marine debris. This will be the basis to develop a business toolkit to help elaborate recommendations for policy-makers and consequently select a pilot project.[40]
EU countries	Food consumption	The European Commission has implemented actions foreseen under the Circular Economy Action Plan which include: Elaborating a common EU methodology to measure food waste; establishing the EU platform on food losses and food waste; measuring to clarify EU legislation related to waste, food and feed; facilitate food donation; among others.[41]

Problems and challenges to apply circularity principles in the pan-European Region

29. Addressing circularity in the pan-European Region and globally requires addressing the complexity of tourism value chains and fragmentation of the sector. The following key challenges are identified:

- Lack of policy integration and coordination between countries at the national and sub-national levels, especially due to sectoral and territorial governance aspects.[42]

---

[38] EU4Environment, https://www.eu4environment.org/news/launch-of-industrial-waste-mapping-in-the-rustavi-and-zestaponi-municipalities-in-georgia/
[39] SUSTAINAIR, https://www.sustainair.eu/sustainair-technology-and-impact/
[40] WBCSD, https://www.wbcsd.org/Programs/Circular-Economy/Factor-10/Roadmap-for-reducing-Ocean-Waste
[41] European Commission, https://ec.europa.eu/food/food/food-waste/eu-actions-against-food-waste_en
[42] The tourism sector contemplates legal and normative means of public coordination, collaboration and cooperation in the sectoral and territorial structures of government. Legal and normative means of co-responsibility, transparency and accountability between both the public and private sectors are also relevant. Governments should pay attention to allow collaboration on these concrete aspects to improve governance in the sector., http://www.aalep.eu/governance-tourism-sector

- Insufficient data on sustainable infrastructure statistics, policies and initiatives for decision-making purposes in the region.

- The management complexity resulting from the systemic nature and interdependencies of tourism with other sectors (e.g. energy, transport, construction, etc.); value chain activities (e.g. food and drinking); or functional services (e.g. water supply management).

30. The tourism sector entails a broad spectrum of activities in the entire value chain. The "One Planet Sustainable Tourism Programme" has already started to identify the connections with the built environment and food value chains as priorities globally.[43] A comprehensive mapping exercise applying hotspot and value chain approaches could be conducted in the pan-European region for more accurate prioritization of actions. The following key sectors in the supply chain have been preliminary identified as priority areas to be considered for the implementation of circularity models:

Resource-efficiency related

31. *Waste management:* While tourism supports economic prosperity, it can also cause negative externalities like high levels of unsustainable resource consumption and waste production. This is especially true in urban areas. For instance, tourist cities in Europe have to face additional challenges related to waste prevention and management due to their geographical and climatic conditions, and the seasonality of tourism flows.[44] Tourism facilities generate large volumes of solid waste which if not properly managed can result in negative ecological, disease and aesthetic impacts. The only economically viable, and long-term approach to avoiding environmentally harmful waste is to prevent its production. However, solid waste, although diverse in nature, is often a recoverable source and can be profitable if effective waste disposal management techniques are used. Waste management options include waste reuse, recycling, recovery and disposal.[45] An example of such an approach is Europe's Horizon 2020 project called "Urban Waste" to help policy makers in developing strategies that aim at reducing the amount of municipal waste production and at further supporting the re-use, recycling, collection and disposal of waste in tourist cities.[46]

32. *Water and wastewater:* In several transboundary river basins, water allocation challenges are increasing. Moreover, irrigation, over-abstraction and highly polluted return flows threaten groundwater supplies, especially in Central Asia. The "ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes" and the "European Union Water Framework Directive" are the most important instruments, alongside bilateral and multilateral conventions on transboundary river, lake and groundwater basins, such as the Danube. Improved coordination between energy, agriculture, biodiversity and water policies can support progress on water quality and quantity and the required climate change mitigation and adaptation actions.[47] In addition, many coastal towns do not have sewage treatment plants and instead discharge their wastewater directly into oceans in dense-populated areas (e.g. The Mediterranean Sea). Oil tankers, industries and

---

[43] UNWTO, https://www.unwto.org/sustainable-development/one-planet
[44] https://www.interregeurope.eu/winpol/news/news-article/4476/linking-tourism-and-sustainable-waste-management/
[45] UNEP, https://wedocs.unep.org/bitstream/handle/20.500.11822/9432/-A%20Manual%20for%20Water%20and%20Waste%20Management_%20What%20the%20Tourism%20Industry%20Can%20Do%20to%20Improve%20Its%20Performance-2003648.pdf?sequence=2&amp%3BisAllowed=
[46] EU, http://www.urban-waste.eu/
[47] UNEP, https://www.unep.org/global-environment-outlook/findings-and-data/assessment-findings/geo-6-regional-summary-europe

agriculture also pollute European waters with waste and toxic substances.[48] The Barcelona Convention and its Protocols were adopted in the framework of the Mediterranean Action Plan (MAP) and thereby constitute the principal regional legally binding Multilateral Environmental Agreement (MEA) in the Mediterranean.[49]

Box 1: Plastics

Plastics are a catalytic element for waste and water management. Pan-European countries face as many other countries in the world plastic waste management issues. EU countries alone produced roughly 58 million metric tons of plastic in 2019.[50] But despite efforts to reduce waste levels on the continent, only 30% is actually recycled.[51] Coastal areas in Europe attract more tourists, however this leads to more contamination. The pandemic has in a way helped to reduce the amount of plastic waste generated in these areas, however efforts should be continuously targeting the management of waste and impacts of plastics in land designated for touristic purposes and their surrounding waters, as harmful substances caused by plastic waste are still degrading coastal and open Pan-European oceans.[52]

---

a) Industry-related

33. *Food and Beverage:* Food is a key element of the tourism experience and a differentiating factor for destinations and at the same time represents an entry point for circularity and transformation in tourism value chains through: Sustainable procurement (local and organic sourcing, sourcing from market surplus or collective procurement); sustainable menus (including healthy and plant-rich dishes) and food waste and loss reduction and management.[53] In the hospitality industry, food waste has become an increasing and costly concern. European restaurants face increasing operating costs due to food waste. In this context, a Swiss automated food waste management solution called "KITRO" was created to measure and mitigate food waste, with the overarching goal to address a market size of 1.3 million outlets in Europe.[54] However, further actions are required to change consumption and management patterns at a larger scale.

b) Infrastructure-related

34. *Retrofit real estate and infrastructure:* Tourism development relies on high quality public and private infrastructure. Real estate & hospitality sectors support cross-border investments and regional integration in the Pan European region. Retrofit of buildings used for tourism purposes, as well as other infrastructure assets such as airports and roads are essential to reduce climate change impacts and enhance resource efficiency. Both public and private investors in the region are interested in the modernization and efficiency of buildings and other related infrastructure.[55] For example, the European Bank for Reconstruction and

---

[48] https://www.tourism-review.com/plastic-waste-choking-the-mediterranean-fish-news11471

[49] UNEP, https://www.unep.org/unepmap/who-we-are/barcelona-convention-and-protocols

[50] https://www.statista.com/statistics/987838/plastics-production-volume-in-the-eu-28/

[51] https://www.euronews.com/green/2019/12/12/europe-has-a-plastic-problem-only-30-of-plastic-waste-is-recycled

[52] UNEP, https://www.unep.org/resources/report/geo-6-global-environment-outlook-regional-assessment-pan-European-region

[53] https://www.oneplanetnetwork.org/initiative/supporting-food-waste-and-loss-reduction-tourism-sector

[54] https://www.oneplanetnetwork.org/initiative/first-fully-automated-food-waste-management-solution-food-and-beverage-industry

[55] PwC, https://www.pwc.com/sk/sk/assets/PDFs/pwc-emerging-trends-real-estate-europe-2020.pdf

Development (EBRD) introduced the "Property & Tourism Strategy" to support investments for growth and development of sustainable and well-functioning real estate and hospitality sectors (greener buildings, inclusive tourism and urban regeneration) in EBRD countries of operations.[56]

35. *Mobility:* Within tourism activities, the transport sector, including air, car and rail, generates the largest proportion of tourism-related emissions, accounting for 75%.[57] Air quality is the largest environmental health risk to the pan-European population, with disproportionate effects on children, the elderly and the poor. Transport-related greenhouse gas emissions from tourism have been estimated at 5% of all human originated emissions.[58] The lack of travel as a result of the COVID-19 pandemic has impacted in a positive way on air pollution. However, transport initiatives for recovery plans are determinant to avoid a rebound of environmental pressures for different transport means. For instance, policy packages, such as those advocated by the Transport, Health and Environment Pan-European Programme (the PEP), can help promote public transport in combination with walking and cycling as part of urban and eco-touristic destinations.[59] People in general can enjoy their activities without using individual cars and but still stay fully mobile, making mobility soft (climate-friendly and sustainable).[60] Adequate planning and management for tourism and transport, just like other related sectors are critical for a successful recovery. For example, improvements in technology and operations can improve fuel efficiency of transport if incentivized. Both sectors (tourism and transport) need to combine energy efficiency with a rapid transition away from fossil fuels. Additional policies are required to drive changes in technology, operations, and fuel's use and demand.

Box 2: Finance, banking and insurance as overarching sector

The pandemic has introduced more risks with regards to finance and insurance by private investors for tourism-related supply-chain activities not only in the pan-European region, but also globally. However, these activities are essential for the transformation of tourism, especially from a regional perspective. For instance, European Structural and Investment Funds have been used for both EU and cross-border projects to support travel infrastructures, restoration of contaminated sites, energy efficiency in hotels, among others.[61]

Ongoing initiatives on Circular Economy and Tourism

36. *Circularity principles and new business models:* The tourism industry has followed a traditional linear-volume growth model, providing positive economic contributions to different destinations in European markets. Nevertheless, there is a sense of urgency to find new sustainable long-term models with adequate resilient strategies to offset negative externalities caused by the tourism sector. For such a shift to happen, it is required to work across the entire value chain with all involved stakeholders, where models use circular and life-cycle based approaches to making products and services more sustainable.[62] Circular economy is at the core of new

---

[56] EBRD, Property & Tourism Sector Strategy 2020–2024
[57] UNWTO, https://www.e-unwto.org/doi/pdf/10.18111/9789284416660
[58] UN, https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid-19_tourism_august_2020.pdf
[59] UNECE, https://unece.org/transport-health-environment-pep-0
[60] Alpine Pearls – mountain tourism, https://www.alpine-pearls.com/en/car-free-holiday/soft-mobility/
[61] European Commission Guide for EU funding for Tourism 2014–2020
[62] https://www.oneplanetnetwork.org/why-tourism-matters

business models that follow a systematic approach and regenerate natural and human capital.

37. The Global Tourism Plastics Initiative is developed within the framework of the Sustainable Tourism Programme of the "One Planet network", a multi-stakeholder partnership to implement SDG 12 on Sustainable Consumption and Production. It is led by the UN Environment Programme and the World Tourism Organization, in collaboration with the Ellen MacArthur Foundation.[63] The Global Tourism Plastics Initiative acts as the tourism sector interface of the New Plastics Economy Global Commitment which already unites more than 450 businesses and governments. It is also aligned with the New Plastics Economy vision, framework and definitions to mobilise the global tourism sector towards concerted action against plastic pollution. The initiative sets concrete and actionable commitments by 2025, including among others, the engagement of the value chain in moving towards 100% of plastic packaging to be reusable, recyclable, or compostable, investments to increase recycling rates, and public reporting of targets.[64]

38. *Policies and practices:* Even if different governments agree with the need to develop long-term sustainable tourism strategies[65], the unfortunate events of the global pandemic have posed the risk that governments go for the short-term gains of "business as usual". Since the tourism ecosystem is comprised by many different sectors, value chains and functional services, policies and legislations are into some extent fragmented. Regional initiatives are now introduced to solve this issue, while supporting national strategies.

39. The European Commission is encouraging a holistic and integrated approach to consolidate EU initiatives and it has therefore developed an Agenda for a sustainable and competitive European Tourism, in addition to the European Tourism Indicators System (ETIS) which is a management and information tool, as well as a monitoring system of the sustainability of tourist destinations.[66] Based on ETIS, Croatia has developed the Croatian Sustainable Tourism Observatory (CROSTO). The Observatory provides regular and timely monitoring of sustainable tourism in the Adriatic Croatia, contributing to the assessment of possible potential positive or negative impacts of tourism development in the region.[67]

40. *Digitalisation:* Digital technology is an important component of collecting social, economic and environmental data for the improvement of tourism planning and strategies.[68] This factor is critical for the transformation ahead and for the right decisions to rebuild the tourism sector after COVID-19.

41. "Visit Valencia" has taken action towards becoming a carbon neutral destination by 2025, as a strategic response to COVID-19, by using an SDG compass, comprising a dashboard of indicators. The region is likewise implementing a roadmap for tourism decarbonization in three core phases: initial calculation of the footprint of the destination and its actors, implementation of a digital management system, and development of compensation projects in the territory.[69]

42. "Tourism Innovation Centre Portugal" is a major project to promote private sector participation for the transition of the Portuguese tourism sector to the digital

[63] https://www.oneplanetnetwork.org/sustainable-tourism/global-tourism-plastics-initiative
[64] UNWTO, https://www.unwto.org/sustainable-development/global-tourism-plastics-initiative
[65] OECD, https://www.oecd.org/cfe/tourism/OECD-Policy-Statement-Tourism-Policies-for-Sustainable-and-Inclusive-Growth.pdf
[66] https://ec.europa.eu/growth/sectors/tourism/offer/sustainable/indicators_en
[67] OECD, https://www.oecd-ilibrary.org/industry-and-services/managing-tourism-development-for-sustainable-and-inclusive-recovery_b062f603-en
[68] WWF, https://wwf.panda.org/?335612/Digital-transformation-vital-for-sustainable-tourism
[69] UNWTO, https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2021-05/210504-Recommendations-for-the-Transition-to-a-Green-Travel-and-Tourism-Economy.pdf?wiwmhlGgXT4zwXles_Q8ycdITGIQfaMt

economy, while fostering innovation and entrepreneurship. The Centre was set up as a private association in 2019, with founding partners including Airports of Portugal, BPI Bank, Portugal Highways, Google, Microsoft Portugal, Millennium BCP, NOS (Telecom) and Turismo de Portugal.[70]

43. *Circular Indicators relevant to tourism:* Indicators are key when measuring circular approaches in different value chains and across sectors. To this end, the Platform for Accelerating the Circular Economy (PACE) comprised by a global community of leaders from business, government and civil society, has developed a framework for cross-sectoral business metrics, which could be applied for tourism, especially concerning priority sub-sectors (e.g. waste, food, transport). This framework considers that the transformation steps from linear to circular business models require a variety of indicators (those including the desired state of circularity, performance parameters in the value chain, and those at the process level to attain the desired state).[71] The World Business Council for Sustainable Development (WBCSD) likewise developed a business-oriented "Circular Transition Indicators" framework and tool applicable to all industries, sizes, value chain positions and geographies.[72] From a country perspective, the European Commission has also developed a standard framework of circular economy indicators for monitoring and benchmarking in EU countries in four main categories: production and consumption (e.g. EU self-sufficiency for raw materials); waste management (e.g. recycling rate of municipal waste); secondary raw materials (e.g. circular material use rate); and competitiveness and innovation (e.g. private investments, jobs and gross-value added related to circular economy sectors).[73] So far, there is no consensus of circular indicators solely oriented to the tourism sector. However, these frameworks show interesting examples for the definition of cross-sector circular indicators that could be applicable to tourism from a business and country perspective.
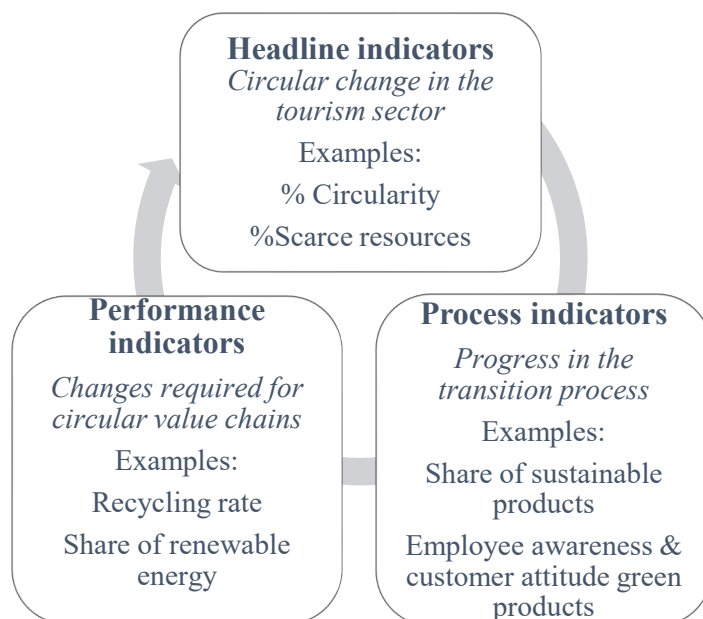

Figure 4: Types of indicators for circular businesses (Source: PACE)

[70] OECD, https://www.oecd-ilibrary.org/sites/46decc94-en/index.html?itemId=/content/component/46decc94-en
[71] PACE, https://pacecircular.org/sites/default/files/2021-03/5faa4d272e1a82a1d9126772_20201029%20-%20BCG%20Metrics%20-%20White%20Papers%20-%20The%20Landscape%20-%20210_x_297_mm%20-%20bleed_3_mm.pdf
[72] WBCSD, https://www.wbcsd.org/Programs/Circular-Economy/Factor-10/Metrics-Measurement/Circular-transition-indicators
[73] EU, https://ec.europa.eu/eurostat/web/circular-economy/indicators/main-tables

> **Box 3: Example of Plastic recycling indicators in Romania (Green Tech)** [74]
>
> Headline indicator: European Plastic Strategy with the target to achieve a 55% recycling rate by 2030.
> Performance indicator: Romania has a recycling rate of 15%. The company Green Tech is improving recycling capacity from 12, 000 tonnes per year to 100 000 tonnes per year to improve the region's performance and the country's overarching recycling rate.
> Process indicator: Creation of more than 1,100 jobs in the region of Buzău.

Opportunities to promote sustainable tourism in the Pan-European region

44. *Promoting governance and data harmonization for tourism and interconnected sectors, products and services.* Better governance is needed for more sustainable and resilient destinations. In this context, UNEP brought together more than 350 participants in November 2020 from the wider European region and other parts of the world, to discuss how to build back greener by applying principles of circularity, digitalization, innovation and cooperation. One of the key outcomes identified reflects the opportunity to use digital platforms to harmonize indicators that allows for a comprehensive outlook taking into account the economic, socio-cultural and environmental aspects, including also a consideration of public perception of tourism among the population.[75] In this context, the establishment of a pan-European Shared Environmental Information System, by UNECE is an important step towards a shared vision.[76] Even if this is not specific to tourism, the activities can be coordinated to work as well with the UNECE's pan-European assessment team focused on sustainable tourism, among other key experts and stakeholders. Consequently, the right policies and instruments could be established to retrieve the necessary high-level indicators to monitor progress in the tourism sector.

45. *Investing in green and blue tourism.* Green[77] and blue tourism[78] strategies and solutions are critical for environmental conservation and the enhancement of ecosystem services, to enable a positive transformation of the sector and COVID-19 recovery. Tourism was projected to become the single-largest sector of the ocean economy by 2030, with an estimated value in 2016 of USD 1.5 trillion. It was expected that by 2030 there would be 1.8 billion tourist arrivals and that marine and coastal tourism will employ more than 8.5 million people.[79] This involves as well European coastal areas. With regards to green tourism, several countries in the region are implementing sustainable tourism projects to accelerate the transition to sustainable consumption and production patterns, including the use of renewable energy sources, development of green infrastructure and other measures that support

---

[74] MyClimate, https://www.myclimate.org/information/carbon-offset-projects/detail-carbon-offset-projects/romania-waste-management-7231/

[75] One Planet Network, https://www.oneplanetnetwork.org/transforming-tourism-resilient-and-sustainable-post-covid-world-event-summary, and UNECE CEP webinar summary paper 2020

[76] UNECE, https://unece.org/sites/default/files/2020-12/ece_cep_187_publication_.pdf

[77] Green tourism has been used interchangeably with such concepts as ecotourism, nature tourism, and rural tourism. Businesses have generally adopted a broader meaning for green tourism: any tourism activity operating in an environmentally friendly manner (Source: https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-01384-8_264)

[78] Blue Tourism is a project focused on the analysis and evaluation of coastal and maritime tourism at the global level. It comprises a regional sector review, as well as scalable regional initiatives to strengthen maritime governance and environmental management in the coastal and maritime sector, Eco Union https://www.ecounion.eu/en/portfolio/blue-tourism/

[79] UNWTO, https://www.unwto.org/archive/global/press-release/2011-10-11/international-tourists-hit-18-billion-2030

environmental sustainability, especially resulting from over-tourism and climate change.[80]

46. *Applying circularity principles across the value chain.* Circular economy principles should be applied to move towards better business models for tourism in the Pan-European region**.** Assessments (e.g. hotspot analysis)[81] and advisory services could be instruments to apply circular strategies and actions. UNEP together with the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety is implementing a project following a holistic and integrated perspective in three concrete value chains (food and beverage, accommodation and meetings, conferences and events) in four concrete countries.[82] A similar methodology could be applicable to a few pilot countries in target priority sectors and selected value chains for the Pan European region through the One Planet Network and potentially in collaboration with the EU4 Environment initiative.

47. *Consumer information tools, labels and standards need to be harmonized.* There is a need to align consumer information tools in tourism to make them comparable. The Global Sustainable Tourism Council (GSTC) is the organization that establishes and manages global standards for sustainable travel and tourism. The standards are composed of: *Destination Criteria* for public policy-makers and destination managers, and *Industry Criteria* for hotels and tour operators. At the EU level there are around eight directives that impact on the tourism sector, encompassing as well a regulation on the EU Eco-label.[83] Pan-European countries, private travel agencies platforms, and other relevant actors could benefit from these examples and collaborate with key stakeholders like GSTC or UNWTO to follow the right standards, and measure performance as part of the sector's transformation process.

48. *Enhancing local tourism for climate change resilience and safety.* Governments in the pan-European region may develop strategies and policies to promote sustainable tourism in local destinations, following health safety measures. Even if boundaries and international travel restrictions might cease gradually with new vaccine programmes, domestic policies with climate change adaptation and mitigation measures, can already generate a positive transformation to promote tourism that creates jobs and provides long-term economic benefits to local communities. For instance, the Ministry of Culture and Tourism in Turkey introduced the 2023 Tourism strategy, by adopting an integrated approach to mainstream high local tourism potential, while at the same time following a systematic structuring for sustainable infrastructure solutions that consider environmental concerns.[84]

49. *Engaging the private sector and policy makers to leverage sustainable and circular procurement to reduce GHG emissions and accelerate the shift towards a more resilient, resource efficient development of the tourism sector.* Most purchasing professionals acknowledge the benefits of procuring more circular products, materials and services, in particular for the reduction of water, chemicals and energy use, hence reducing overall lifecycle costs.[85] Circular procurement practices may also help address structural issues, such as a lack of public transportation, which can be mitigated by the set of shared transport services for personnel, or the inadequate

---

[80] UNECE CEP webinar Summary paper 2020.

[81] A "hotspot" is defined as either a component of the system that directly or indirectly contributes to plastic leakage and impact, or that can be acted upon to mitigate this leakage or the resulting impacts, https://www.unep.org/news-and-stories/story/guidelines-target-plastic-pollution-hotspots

[82] The countries involved in the project are the Philippines, Dominican Republic, Mauritius and St. Lucia

[83] EU, https://ec.europa.eu/growth/sectors/tourism/business-portal/understanding-legislation/european-tourism-legislation_en

[84] https://www.ktb.gov.tr/Eklenti/43537,turkeytourismstrategy2023pdf.pdf?0&_tag1=796689BB12A540BE0672E65E48D10C07D6DAE291

[85] EU, https://ec.europa.eu/environment/gpp/pdf/Public_procurement_circular_economy_brochure.pdf

waste management facilities in some destinations, which can be circumvented by incorporating take-back provisions in contracts aimed at reducing waste to be treated on-site. Such resource-efficient approaches not only contribute to minimize the environmental impacts of tourism activities and improve the reputation of tourism stakeholders but may also lead to a behaviour change for sustainable consumption by travellers and professionals.[86]

II.   Practice and experience in sustainable tourism

50. *International organizations.* International organizations are working to develop standards, methodologies and statistics for sustainable tourism. Some of the key initiatives are listed as follows:

- The United Nations Statistics Division (UNSD) and UNWTO launched the initiative *Towards a Statistical Framework for Measuring the Sustainability of Tourism (MST).* The aim is to develop an international statistical framework for measuring tourism's role in sustainable development, including economic, environmental and social dimensions.

- UNWTO also released the *International Recommendations for Tourism Statistics* in 2018 providing a comprehensive and methodological framework for collection and compilation of tourism statistics.[87]

- The G20 Italy Presidency and Chair of the Tourism Working Group, and the OECD Tourism Committee developed policy areas and guidelines for action such as: safe mobility, crisis management, resilience, inclusiveness, green transformation, data transition and investment in infrastructure.[88]

- UNWTO as previously mentioned in this document, recently released the *Recommendations for a Green Travel and Tourism economy* as the foundation for more balanced, sustainable and resilient models in tourism development. These were identified as a key resource for advancing progress in the policy area of "Green Transformation" of the world's leading economies. The recommendations present the main lines of action and showcase frontrunning initiatives of tourism businesses and destinations leading the way in achieving greater sustainability.[89]

51. *Regional experiences.* Guidance at the regional level for sustainable tourism in European countries are currently following joint plans for COVID-19 recovery. For instance, the *European Tourism Manifesto* alliance, was recently established as a group of more than 60 public and private travel and tourism organisations and the voice of the sector in Europe, for the development of joint recommendations for EU Member States. These include ways to relaunch travel and tourism in Europe in time for summer 2021 and an EU roadmap for restoring travel once countries emerge from national lockdowns.[90]

52. *National experiences.* Medium and long-term tourism impacts of COVID-19 vary between countries, destinations, and segments of the tourism sector. However, the common nominator is that while the virus is still circulating, governments have the challenge to take balanced, measured and co-ordinated policy actions. This is

---

[86] Helena Rey de Assis, UNEP 2021

[87] UNWTO, https://www.unwto.org/standards/un-standards-for-measuring-tourism

[88] G20, https://www.g20.org/wp-content/uploads/2021/05/G20-Rome-guidelines-for-the-future-of-tourism_OECD-report-to-G20-TWG_CLEAN-COVER.pdf

[89] https://www.oneplanetnetwork.org/collective-vision-recommendations-action-g20-tourism-ministers-welcome-unwto-recommendations

[90] EU, https://tourismmanifesto.eu/europes-travel-tourism-sector-calls-on-eu-governments-to-chart-restart-plan-in-time-for-summer/

especially true not only at the international level, but especially at national and local levels in order to protect people, minimize job losses and business closures in the immediate and long-term.[91] For instance in the United States, the travel and tourism sector will benefit from a USD 2 trillion economic stimulus package open to all businesses, especially for those hardest hit industries, including airlines, airports, and travel agents. The package will be delivered through a mix of measures including cash payments, loans, grants and guarantees.[92]

53. *The private sector.* Private operators are increasingly innovating to apply circular models to their businesses and infrastructure assets. This is especially true for real estate and hotel chains. For instance, the hotel chain Accor is using second-hand materials for its furniture procurement, with the purpose to reduce physical asset costs and reduce primary raw material use. It also seeks to support local human capital by collaborating with NGOs and other partners.[93] Another interesting example is the Iberostar's effort along UNWTO's One Planet Vision to become waste free by 2050. The company is doing this by undertaking circular strategies, minimizing footprint, and offsetting climate change with blue carbon solutions (e.g. mangrove and coral reef restoration programmes).[94] However, it should be noted that the public sector can work with governments via PPPs for sustainable tourism, encompassing a variety of different models, from simple social collaborations to major green infrastructure and circularity projects.[95] Further to this, investors also play an increasing role due to the amount of capital investments required for circular projects.

III.   The Future, and our place in it

54. Based on the evidence and current practices, it is imperative for both UNEP and UNECE to work with dedicated tourism organizations such as UNWTO, other government bodies such as the OECD and the European Commission, representatives from the private sector, relevant Ministries, among other tourism organizations, to apply existing guidance for long-term sustainability in the tourism sector across pan-European countries. This work can be supported through PPPs, digitalisation agendas, and evidence on new business models for circularity in tourism.

Next Steps EfE process

55. Pan-European countries, UNEP, UNECE and UNWTO should work together to bridge knowledge gaps and retrieve the evidence required for the definition of right policy actions or strategies to apply circular principles in the tourism sector. Harmonized approaches can facilitate this exercise in consultation with relevant experts in circular principles and indicators (e.g. the European Commission, OECD,

---

[91] OECD, https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronaviruscovid-19-6466aa20/

[92] OECD, https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronaviruscovid-19-6466aa20/

[93] EU, https://circulareconomy.europa.eu/platform/sites/default/files/circular-economy-in-travel-and-tourism.pdf

[94] UNWTO, https://www.unwto.org/covid-19-oneplanet-responsible-recovery-initiatives/responsible-tourism-the-key-to-building-back-a-better-industry

[95] OMIN, http://www.oas.org/en/sedi/desd/itc2011/pres/Arthur_Smith.pdf

among others). This collaborative work to apply circular economy principles in tourism could be conducted as follows:

    (a) Use existing platforms such as the 10-Year Framework Programmes on Sustainable Consumption and Production to:

- *Apply principles and harmonize indicators for circularity in tourism*, to bridge knowledge gaps in the region. This could help retrieve evidence, promote good practices, and allow for replicability in broader countries.

- *Establish reporting frameworks* to enable ongoing monitoring and assessment based on harmonized criteria for the pan-European region. Digital tools could be fostered through the existing platforms.

- *Share knowledge and best practices* to publish information on good practices and contribute to the inter-agency efforts aimed at fostering a sustainable tourism recovery to build back better in the tourism sector.

    (b) *Support building circularity criteria in tourism financing and investment, in collaboration with banks and governments for the green recovery.* This would help address knowledge gaps in the tourism ecosystem, since there is no sufficient evidence of circularity in the tourism value chain.

    (c) *Enhance regulations for new tourism development to integrate tourism circular principles.* Applying existing recommendations (e.g. UNWTO's recommendations for tourism's green transformation) and standards could help countries shape regulatory frameworks that support circular economy in the tourism sector, while incentivizing circular business models.

    (d) *Support regional destinations and management organisations to integrate circular principles.* Target specific destinations and support circular management approaches under existing programmes when feasible.

    (e) *Invest in research and cross-linkages with priority sectors like food, plastics, sustainable building and construction.* Research on consumption, production and demands in pan-European countries is needed to retrieve specific evidence for a sustainable recovery in the sector. Moreover, a comprehensive analytical work of tourism ecosystems (e.g. value chain and hotspot analysis) could be advantageous to define priority sectors and required action steps at regional and national levels. Some countries could be likewise selected as potential pilots for this exercise.

IV. Conclusions and the way forward

Enhancing circular economy in tourism through multi-stakeholder cooperation is critical to build back better in the pan-European region

56. Tourism is one of the sectors most affected by the current crisis in most pan-European countries. Even if global or regional initiatives are undertaken, research is required to enhance the right policies and actions to accelerate recovery in the tourism sector through circular models, and achieve transparency for the pan-European region. This can be developed through cooperation between governments, the private sector, international organizations, and other key stakeholder groups.

Applying circularity models provide the perfect opportunity for governments to transform the tourism sector due to its systemic nature

57. Tourism is the perfect example of the systemic nature of infrastructure assets and related value chain activities. The sustainable transition of tourism rather than a challenge can be acknowledged as an opportunity for countries to apply circularity principles and business models for all infrastructure sectors related to touristic processes and activities such as transport, water and waste management, among others. By implementing programmes and projects oriented to apply circular models in the tourism value chain, sustainable consumption and production can be accelerated and tangible evidence can be retrieved for the pan-European region.

The way forward – Investing in green, blue tourism and digitalisation to rebuild tourism for the future

58. Besides retrofitting and applying circularity principles, both existing and new tourism infrastructure should enhance ecosystem and nature conservation, protecting oceans, rivers and lakes. Digital technologies are key to prompt effective decision making through data by all key stakeholders (from governments to businesses, tourism operators and tourists themselves). Furthermore, information can support adherence to quality standards and labels for sustainability in the sector.

Annex I: Sustainable tourism examples

Project	Scope	Main Impact
Green Economy: Sustainable Mountain Tourism and Organic Agriculture (GRETA)(Link) Country: Georgia	The project is part of EU's efforts for the development of sustainable mountain tourism & organic agricultural production. It supports small and medium enterprises of Georgia with the purpose of improving and scaling-up their capacities. It works with local authorities, public and private sector stakeholders in Samegrelo-Zemo Svaneti, Racha-Leckhumi-Kvemo Svaneti and upper Imereti region	• Legal and policy framework for mountain tourism and organic agriculture to enable sustainable and inclusive development • Increased employment and income in both sectors due to new and better products and services and through better market linkages, locally, nationally and internationally (at least 20% increase in income); • Access to capacity development measures for people and institutions active in the fields of sustainable mountain tourism and organic agriculture (system of knowledge management); • Support to 400 small-scale business enterprises and producers in mountain tourism, 300 accommodation service providers, 300 other tourism service suppliers, 230 farmers in organic agriculture, 2 certification bodies as well as 76 local villagers and inspectors.
Andalucía SmartData Project"(Link)	In Spain, the region of Andalusia launched the "Andalucía SmartData Project" for digitalisation across the entire region, its municipalities and SMEs, with the goal of fostering implementation of new technologies in the tourism sector.	• The project follows a collaborative approach to define the sustainable tourism model that Andalusia needs after the pandemic shocks
Riverways. Development of water tourism[96] Country: Latvia, Estonia	The Riverways project was conducted to improve the conditions for sustainable water tourism development and increase its competitiveness vis-à-vis other segments of the travel industry while tackling seasonality and overcrowding in popular tourist destinations.	• Interested stakeholders (i.e. municipalities, entrepreneurs, tourism experts) jointly collaborated to: Identify new products and businesses opportunities; improve the infrastructure and; develop a targeted marketing strategy. • The concerned rivers are now being revitalized to the benefit of nature, and domestic and international tourists. • 15 new water tourism products were developed or improved, supporting 300 local SMEs.

---

[96] Interreg Europe, https://www.interregeurope.eu/fileadmin/user_upload/plp_uploads/policy_briefs/Sustainable_Tourism_Strategies_to_counteract_overtourism.pdf. Other useful cases are showcased as part of the document. More resources available at the platform: https://www.interregeurope.eu/policylearning/good-practices/