



Ninth Environment for Europe Ministerial Conference

Nicosia, 5–7 October 2022

Applying principles of circular economy to sustainable tourism





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Applying principles of circular economy to sustainable tourism

Note by the United Nations Economic Commission for Europe Committee on Environmental Policy and the United Nations Environment Programme

Summary

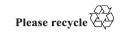
The United Nations Economic Commission for Europe Committee on Environmental Policy at its twenty-fifth session (Geneva, 13–15 November 2019) agreed on the following two themes for the Ninth Environment for Europe Ministerial Conference (Nicosia, 5–7 October 2022):

- Greening the economy in the pan-European region: working towards sustainable infrastructure.
- Applying principles of circular economy to sustainable tourism.^a

At its twenty-seventh session (Geneva (hybrid), 3–5 November 2021), the Committee considered the drafts of two background thematic documents on the above-mentioned themes and asked:

- The Committee to make concrete suggestions and proposals on the first drafts of the two background thematic documents on the themes for the Ninth Environment for Europe Ministerial Conference and to send them to the secretariat, preferably by the end of November but no later than 31 December 2021.
- The Bureau, with support from the secretariat and in cooperation with relevant stakeholders, to further develop the two drafts and submit them to the special session of the Committee in May 2022.^b

Comments on the first draft of the background thematic document "Applying principles of circular economy to sustainable tourism" were received from Czechia, Hungary, Sweden, the European Investment Bank, the Organisation for Economic Co-operation and Development, the United Nations Environment Programme and the World Tourism Organization.





A consultant was contracted by the United Nations Economic Commission for Europe to assist the secretariat in revising and further developing the first draft of the background thematic document.

At its special session (Geneva (hybrid), 9–12 May 2022), the Committee on Environmental Policy:

- Expressed its appreciation for the work undertaken by the Bureau, with the assistance of the secretariat and the United Nations Economic Commission for Europe consultants, the Organisation for Economic Co-operation and Development, the United Nations Environment Programme and the World Tourism Organization, to prepare the revised drafts of the background thematic documents on the themes for the Ninth Environment for Europe Ministerial Conference.
- Asked the Bureau, with support from the secretariat and in cooperation with relevant stakeholders, to further refine and finalize the two drafts and issue them as official documents for the Nicosia Conference.^c

The document aims to facilitate the ministerial discussion by providing background information to support delegations in preparing for the Conference, in particular for the discussion under agenda item 6.

- ^a ECE/CEP/2019/15, para. 21 (b) (i) and (ii).
- ^b ECE/CEP/2021/2, para. 25 (c) and (d).
- ^c ECE/CEP/S/2022/2, para. 24 (a) and (b), available at https://unece.org/node/364855.

I. Setting the scene

A. Tourism – an important economic driver

- 1. Tourism is an important economic driver in many advanced and developing economies. In 2019, prior to the coronavirus disease (COVID-19) pandemic, tourism's direct economic contribution amounted to \$3.5 trillion (4 per cent of world gross domestic product (GDP)), measured in tourism direct GDP.¹ Tourism was, until 2019, the world's third largest export category (\$1.7 trillion) after fuels and chemicals, accounting for 7 per cent of world trade and 28 per cent of trade in services.² Between 2009 and 2019, the number of global international tourist arrivals continued to increase by an average of 5 per cent per year, reaching a record 1.5 billion arrivals in 2019, and global expenditures on travel more than doubled between 2000 and 2019, rising from \$495 billion to \$1.4 trillion. Europe was, in 2019, the world's leader in international arrivals, with 51 per cent, and international tourism receipts, with 39 per cent, followed by Asia and the Pacific, with 25 per cent of international arrivals and 30 per cent of international tourism receipts.³
- 2. Due to its multiplier effect, tourism has also a big indirect impact on other sectors, such as agriculture, transportation and finance.
- 3. While tourism represents a substantial part of GDP for many economies around the world, it is even more important for certain regions that benefit from tourism due to their geographical and cultural characteristics. For example, in Spain, tourism accounted for 12 per cent of GDP in 2019 and 33 per cent of GDP for the Canary Islands region (Spain).⁴

B. Tourism overshooting the ecological ceiling

- 4. The current linear economic tourism model contributes to many negative externalities, overshooting the ecological ceiling due to its increasing energy demand, high amounts of waste generation, water consumption and uncontrolled wastewater discharges, and increasing global greenhouse gas emissions. According to a study published in 2015, future tourism resource consumption of water, food, land, energy and emissions may double within the next 25–45 years. Many environmental impacts of the tourism industry are linked to infrastructure construction and management (e.g., roads, ports, airports and tourism facilities), as well as to transportation, greenhouse gas emissions, energy consumption, solid waste generation and water consumption/pollution.
- 5. From a greenhouse gas emissions perspective, tourism's share of global emissions of carbon dioxide (CO₂) was estimated at 5 per cent in 2008, with transport representing 75 per cent.⁶ More recent studies point to tourism representing around 8 per cent of global emissions.⁷ In 2016, transport-related tourism emissions were estimated to represent 5 per cent of global emissions and forecast to grow by 25 per cent by 2030, under a "business-asusual" scenario.⁸ Within tourism-related greenhouse gas emissions (pre-pandemic),

World Tourism Organization (UNWTO), "The Economic Contribution of Tourism and the Impact of COVID-19" (Madrid, 2021).

² UNWTO, International Tourism Highlights: 2020 Edition (Madrid, 2021).

³ Ibid

Exceltur, "IMPACTUR Canarias 2020", report, 11 February 2022, available at www.exceltur.org/impactur-2/#.

⁵ Stefan Gössling and Paul Peeters, "Assessing tourism's global environmental impact 1900–2050", Journal of Sustainable Tourism, vol. 23, No. 5 (March 2015), pp. 639–659; See also the United Nations Environment Programme (UNEP) and UNWTO, Tourism in the Green Economy: Background report (Madrid, 2012).

⁶ UNWTO and UNEP, Climate Change and Tourism: Responding to Global Challenges (Madrid, 2008).

Manfred Lenzen and others, "The carbon footprint of global tourism", *Nature Climate Change*, vol. 8 (May 2018), pp. 522–528.

⁸ UNWTO and the International Transport Forum (ITF), Transport-related CO₂ Emissions of the Tourism Sector: Modelling Results (Madrid, 2019).

transportation accounts for 48.6 per cent, accommodation for 6 per cent and food and beverages for 9 per cent.⁹

- 6. From an energy consumption perspective, in a "business-as-usual" scenario, tourism will see an increase of 154 per cent in energy consumption by 2050. The tourism industry consumes significant levels of energy, mostly generated through fossil fuels. The high energy consumption is due to both transport-related activities, such as travel to, from and at the destination, and destination-related aspects, such as accommodation, food and tourist activities. The rapid growth in both international and domestic travel, the increasing trend of travelling greater distances over shorter periods of time, and the preference for energy-intensive transportation modes have increased demand for fossil fuels, energy consumption and energy dependency.
- 7. From a solid waste generation perspective, single-use consumer goods and food waste in hotels and restaurants account for 60 per cent and 40 per cent, respectively, of all solid waste generation in tourism. Tourists generate approximately 1 kg/per person/per day of solid waste when touring in Europe. This figure can vary from 1 to 12 kg/per tourist/per day depending on the attributes of the tourist, the season of the year and the environmental legislation in the destination. The high amounts of solid waste generated put significant pressure on popular touristic regions with a low population density, as well as on touristic regions lacking waste management programmes and proper infrastructure, and with no, or only rudimentary, environmental protection legislation. All of this is aggravated during the peak seasons. Tourism facilities generate large volumes of solid waste, which, if not properly managed, can result, among other things, in surface-water and groundwater contamination, soil contamination, biodiversity loss, and emissions of air pollutants, which, in turn, contribute to decreasing the destination's value.
- 8. From a water consumption/pollution perspective, the tourism industry generally overuses water resources for hotels, swimming pools, golf courses and personal use of water by tourists. This can result in water shortages and degradation of water supplies, as well as generating a greater volume of wastewater. Coastal and beach tourism (which accounts for up to 80 per cent of all tourism) is one of the top three land-based sources of marine litter, together with sewage effluents and general household in the North Sea, the Mediterranean Sea and the Baltic Sea. 12 Some regions, especially in Central Asia, are more vulnerable than others to water pollution due, for example, to uncontrolled irrigation, existing low volumes of groundwater supplies and their overextraction, inadequate wastewater treatment infrastructure and seasonality. The UNEP/UNWTO Tourism in the Green Economy: Background report states that, in a "business-as-usual" scenario, water consumption will increase by 152 per cent by 2050. Furthermore, according to the World Wide Fund for Nature report Out of the Plastic Trap: Saving the Mediterranean from Plastic Pollution, 13 in the Mediterranean region alone, tourism is responsible during the peak season for an up to 40 per cent increase in the surge of marine litter entering the Mediterranean Sea. 14
- 9. Moreover, the negative externalities/impacts caused by tourism are worsened when it is concentrated in one season only, such as winter or summer.¹⁵ For example, seasonal pressures cause stress into waste management systems, as the generated solid waste's mass

⁹ World Travel and Tourism Council, A Net Zero Road Map for Travel and Tourism: Proposing a New Target Framework for the Travel and Tourism Sector (London, 2021).

UNWTO, "Energy Management", available at www.unwto.org/sustainable-development/unwto-international-network-of-sustainable-tourism-observatories/tools-energy-management.

Sanaa I. Pirani and Hassan A. Arafat, "Solid waste management in the hospitality industry: A review", *Journal of Environmental Management*, vol. 146 (December 2014), pp. 320–336.

Harri Moora and Evelin Piirsalu, "BLASTIC Plastic Waste Pathways into the Baltic Sea: Sources and Pathways of Marine Litter – Background report" (n.p., Stockholm Environment Institute Tallinn Centre, 2016).

¹³ Eva Alessi and Giuseppe Di Carlo (Rome, World Wide Fund for Nature, 2018).

See also UNWTO Global Tourism Plastics Initiative, "Tourism's Plastic Pollution Problem", One Planet Network, available at www.oneplanetnetwork.org/programmes/sustainable-tourism/global-tourism-plastics-initiative/tourisms-plastic-pollution-problem.

Edmundo Muñoz and Rodrigo Navia, "Waste management in touristic regions", Waste Management and Research: The Journal for a Sustainable Circular Economy, vol. 33, No. 7 (2015).

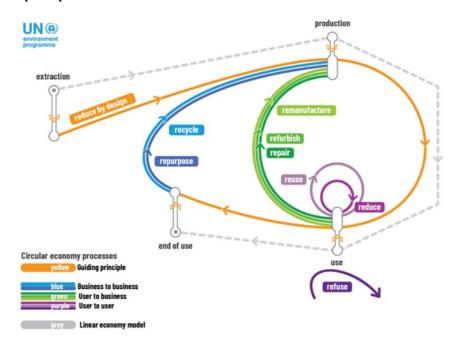
and volume flow are totally season dependent. Resource availability to local communities (e.g., water or energy) is also affected by tourism concentration in peak seasons, including generating impacts to their well-being and livelihoods.

10. Tourism has, therefore, led to the overshooting of several planetary boundaries with its current linear model by contributing to climate change, pollution and biodiversity loss, as well as having an impact on land and marine ecosystems, and now the counter-effects are negatively affecting the tourism industry, and will continue to do so if no action is taken. There is a high probability that there will be a shift in preferences for destinations towards higher latitudes and altitudes due to more attractive climatic conditions, creating both "losers and winners" in terms of visitor flows. Impacts such as decreasing natural snow reliability, increasing water shortages, beach erosion and flooding will affect many destinations globally. For instance, climate change has made flooding in Venice (Italy) more common. This could drastically reduce the tourism incomes on which Venice is so dependent due to change in tourists flows towards other destinations less at risk from such events. Furthermore, according to the World Wide Fund for Nature, the tourism industry in the Mediterranean region loses up to €641 million annually due to marine plastic pollution.¹¹6

C. Circular economy principles

11. Although not specific to tourism, the UNEP "circularity approach" provides guidance and principles to move from linear to circular business models. The approach is based on the guiding principle of reducing resource use by design, which means less use of materials. The figure below illustrates the applicability of the principles for key stakeholders in the value chain.

United Nations Environment Programme "circularity approach", incorporating the "R" principles



Source: UNEP, "Circularity", available at www.unep.org/circularity.

- 12. The "R" principles (see figure above) are defined as below:
- (a) "Reduce by design" requires using less materials per unit of production, especially virgin raw materials, from the earliest stages of product design;

¹⁶ World Wide Fund for Nature (WWF), *Stop the Flood of Plastic: How Mediterranean counties can save their sea* (n.p., 2019).

- (b) "Refuse" is linked to user choices, opting to stop buying or using certain products;
- (c) "Reduce" requires people to rethink how to meet their own needs with the lowest burden on the planet and people around them;
- (d) "Reuse" refers to using a product, object or substance that is not waste, for the same purpose for which it was conceived, again, without the need for repair or refurbishment;
- (e) "Repair" refers to the fixing of a product and/or replacement of defective components, in order to make it a fully functional product to be used for its originally intended purpose. This is meant to extend the product's lifetime. A significant difference between "repair" and "refurbish" is that repairs can be carried out by different actors and may involve a change in ownership;
- (f) "Refurbish" happens during maintenance operations and seeks an overall upgrade of the product. According to the Basel Convention Revised glossary of terms, ¹⁷ "Refurbishment" refers to: "Modification of an object that is a waste or a product to increase or restore its performance and/or functionality or to meet applicable technical standards or regulatory requirements, with the result of making the waste or product a fully functional product to be used for a purpose that is at least the one that was originally intended.";
- (g) "Remanufacture" differs from "refurbish" as it implies a full product improvement where the complete structure of a multicomponent product is disassembled, checked, cleaned and, when necessary, replaced or repaired in an industrial process;
- (h) "Repurpose" requires the reuse of old/discarded components or materials to be adapted for another purpose (e.g., upcycling glass bottles into mugs);
- (i) "Recycle" is the last "R" and the one where the most value is lost. It refers to the relevant operations that prevent waste disposal and allow material to re-enter the loop. Recycling requires the use of expensive technology and infrastructure for processing of mixed post-consumer products or post-producer waste streams to remove impurities and improve material quality.
- 13. Applying circular economy principles to tourism is an ongoing effort and, so far, there is no consensus on what exactly a circular tourism model would look like.

D. Drivers of circular tourism

- 14. There are six main drivers that provide a strong rationale for integrating circular economy principles into tourism operations:
- (a) The pressure exerted by the tourism industry on key resources such as water, energy, land and materials is expected to continue to grow in the long term. This, coupled with the increasing scarcity of resources and fluctuating energy and commodity prices due to external shocks, provides strong incentives for companies to leverage circular economy principles for higher resource efficiency and higher value retention of materials;
- (b) Increasing consumer awareness of the negative social and environmental impacts of the tourism industry has led to a rise in sustainable travel, such as nature-based tourism. A recent survey found out that 61 per cent of global travellers are willing to pursue more sustainable travel in the future and 83 per cent consider sustainable travel as crucial. ¹⁸ Hence, the shift in consumer demand towards more environmentally conscious tourism makes it more attractive for tourism businesses to target such a market;
- (c) Financial and institutional incentives in support of circular economy activities are becoming more frequent. Banks and insurers are encouraging businesses to become more sustainable by making circularity a prerequisite for accessing financial support.¹⁹ The

¹⁷ UNEP, UNEP/CHW/OEWG.10/INF/10, p. 8, available at www.basel.int/tabid/3622.

Booking.com, "Booking.com's 2021 Sustainable Travel Report Affirms Potential Watershed Moment for Industry and Consumers", 3 June 2021.

¹⁹ UNEP, Financing Circularity: Demystifying Finance for the Circular Economy (n.p., 2020).

"transition to a circular economy" is one of the six environmental objectives listed in the twenty-third preambular paragraph of the European Union Taxonomy Regulation;²⁰

- (d) Technological innovations have the potential to support the circular transition, which could allow Europe to increase its resource efficiency by up to 3 per cent annually and generate a net economic benefit of €1.8 trillion by 2030;²¹
- (e) Regulatory frameworks on monitoring and reporting greenhouse gas emission reductions are putting increasing pressure on tourism businesses to improve their sustainability performance, such as in the cruise and aviation industries. ²² The United Nations Economic Commission for Europe (ECE) has made substantial efforts to promote the key drivers of sustainable tourism, namely the rule of law, transparency and effective, safe and inclusive public participation in decision-making on certain related policies, plans and projects;
- (f) The voluntary commitments promoted by the One Planet Network²³ to accelerate sustainable consumption and production in tourism and address the triple planetary crisis of climate change, biodiversity loss and pollution, such as the Glasgow Declaration on Climate Action for Tourism²⁴ and the Global Tourism Plastics Initiative,²⁵ laid the path for tourism businesses across the tourism value chain and tourism destinations to implement tangible actions.

II. Promoting circular tourism at the intergovernmental level

- 15. Intergovernmental collaboration across the pan-European region plays a central role in tackling the four following challenges of a circular tourism model:
- (a) Challenge 1 Lack of understanding of circular tourism and lack of a shared vision aligned with existing international policies: While the concept of circular economy has gained significant popularity in the last years, understanding of circular tourism is still in its infancy, with limited academic and practical research. ²⁶ This results in different perceptions of how circular tourism could and should be established. A strong vision to guide stakeholders across the pan-European region is lacking. ²⁷ Furthermore, the transition towards a circular tourism model needs to be closely aligned with existing sustainability policies. ²⁸ To tackle this challenge, Governments need to develop an evidence-based guiding vision to align efforts on a pan-European level on a science-based understanding of circular tourism embedded in the existing international policy context;
- (b) Challenge 2 Unharmonized standards: Circular tourism standards play a central role as they establish rules and guidelines for tourism players to achieve circularity. Furthermore, agreement on shared practices unlocks synergies (e.g., shared procurement practices allow suppliers to invest in circularity as they can serve a larger harmonized market, circularity-trained staff can move between regions, etc.) and compliance with standards can be leveraged for certifications to attract tourists, creating incentives for tourism organizations

Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, Official Journal of the European Union, L 198 (2020), pp. 13–43.

²¹ Mckinsey Sustainability, "Europe's circular-economy opportunity", report, 1 September 2015.

²² World Travel and Tourism Council, A Net Zero Road Map.

²³ One Planet Network, "Sustainable Tourism Programme", available at www.oneplanetnetwork.org/programmes/sustainable-tourism.

 $^{^{24} \ \} See \ www.one planet network.org/programmes/sustainable-tour is m/glasgow-declaration.$

²⁵ See www.oneplanetnetwork.org/programmes/sustainable-tourism/global-tourism-plastics-initiative.

²⁶ Fabrice Sorin and Stefán Einarsson, "Circular Economy in travel and tourism: A conceptual framework for a sustainable, resilient and future-proof industry transition" (n.p., CE360 Alliance, 2020).

²⁷ Julia Martínez-Cabrera and Francisco López-del-Pino, "The 10 Most Crucial Circular Economy Challenge Patterns in Tourism and the Effects of COVID-19", *Sustainability*, vol. 13, No. 9 (April 2021).

²⁸ UNWTO and UNEP, Baseline Report on the Integration of Sustainable Consumption and Production Patterns into Tourism Policies (Madrid, 2019).

to follow the practices. To unlock these benefits, decision-makers need to harmonize standards that are used to demonstrate that products or services comply with technical requirements aligned to circularity principles;

- (c) Challenge 3 Comparability of metrics and measurement systems: Circular tourism indicators are critical as they help tourism stakeholders measure the effectiveness/progress of the adopted solutions in moving towards circular economy (e.g., monitoring the carrying capacity of destinations), and enable identification of best practices. While general tourism indicators and general circular economy indicators are well developed, initial attempts to establish circular tourism indicators for the pan-European region have not yet reached maturity. Governments need to coordinate to establish harmonized measurement systems to track progress and identify best practices for circular tourism in the pan-European region;
- (d) Challenge 4 External crises jeopardizing progress made: Tourism can suffer significant impacts from four sources of crises: (a) health crises (e.g., the COVID-19 pandemic); (b) natural disasters (e.g., flooding); (c) pollution (e.g., marine plastic pollution in Indonesia); and (d) social and political instability (e.g., the invasion of Ukraine by the Russian Federation). In order to ensure that progress in moving towards a circular tourism model is not reversed in the event of such crises, Governments need to build the resilience of circular tourism against multiple crises.

A. Developing an evidence-based guiding vision

- 16. To develop an evidence-based guiding vision to align efforts on a pan-European level on a science-based understanding of circular tourism, Governments can leverage the following guidelines for action:
- (a) Create a road map to ensure that all tourism stakeholders across the region are aligned and able to cooperate when applying the circular economy principles across the different subsectors in the tourism value chain;
- (b) Share across the ECE member States knowledge on applying circularity from other sectors relevant to tourism through existing circular tools and initiatives, as well as by implementing programmes and projects oriented to applying circular models in the tourism value chain;
- (c) Ensure that circularity policies across the tourism value chain are aligned with science-based targets. Engaging businesses to meet the 2030 Agenda for Sustainable Development and the Climate Agenda 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 value chain interdependencies and identify priority issues, the right life cycle stages, and the right actors and resources.

- 17. UNEP released the Sustainable Consumption and Production Hotspot Analysis Tool, for the identification of hotspot areas to support setting priorities in national sustainable consumption and production, as well as climate policies.²⁹
- 18. The tourism industry entails a broad spectrum of activities along the entire value chain. The One Planet Sustainable Tourism Programme led by UNWTO with the Governments of France and Spain as co-leads and implemented in close collaboration with UNEP has already started to pilot initiatives focusing on a circular economy of plastics (e.g., the Global Tourism Plastics Initiative), food waste and climate action (e.g., the Glasgow Declaration on Climate Action in Tourism).³⁰

²⁹ See http://scp-hat.lifecycleinitiative.org.

³⁰ See www.unwto.org/sustainable-development/one-planet.

19. Assessments (e.g., hotspot analysis) and advisory services could serve as instruments to apply circular strategies and actions. UNEP, together with the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection, is implementing a project following a holistic and integrated science-based approach across three concrete value chains (food and beverages, accommodation and meetings, conferences and events) in the Dominican Republic, Mauritius, the Philippines and Saint Lucia.³¹

B. Define shared standards

- 20. To define shared standards to harmonize practices in order to benefit from synergies, Governments can leverage the following guidelines for action:
- (a) Involve key private and public stakeholders across the tourism value chain to prioritize areas of circular tourism standards development, such as for:
 - (i) Tourism buildings (including design and refurbishments);
 - (ii) Tourism operations (e.g., cleaning, catering, hotel classification systems, environmental licences, etc.);
 - (iii) Procurement (e.g., supplier selection, plastics and packaging, etc.);
 - (iv) Food management (e.g., prevention, diversion from landfill, recovery, donations, etc.);
 - (b) Establish working groups for standard development;
- (c) Promote the benefits of complying with circular tourism standards, for example, by issuing a circular tourism label that could be closely linked to the European Union Eco-label; and by communicating on the importance of the standards.

- 21. British Standard (BS) 8001 (BS8001)³² is a voluntary guidance standard. It is a set of comprehensive and practical guidelines for implementing the circular economy principles on an organizational level. It serves as an initial blueprint of circular economy standards, as no standards have yet been made specific for circular economy in the tourism industry.
- 22. Switzerland Tourism plans to focus its sustainable tourism strategy on promoting certified businesses and integrating sustainability into their operations.³³
- 23. Viabono is a German organization developing sustainability certifications, including a carbon efficiency label for hotels. The certification depicts information on CO_2 emissions per guest night, detailed for transportation, buildings, food and beverages, print media, cleaning and other aspects of the operation. The label also lists the overall emissions from a given business and ranks it on the basis of its climate impact per bed night in one of six categories. Colour coding allows customers to grasp the hotel's performance at a glance, but detailed CO_2 data also enhance carbon literacy.³⁴

³¹ UNEP, "Overview and Hotspots Analysis of the Value Chain in Saint Lucia" (n.p., n.d.).

³² See www.bsigroup.com/en-GB/standards/benefits-of-using-standards/becoming-more-sustainable-with-standards/BS8001-Circular-Economy/.

³³ Switzerland Tourism, "Swisstainable: Strategy for the sustainable development of Switzerland as a travel destination", available at www.stnet.ch/app/uploads/2021/02/Swisstainable_Strategie_E.pdf.

³⁴ UNEP, Consumer Information Tools and Climate Change: Facilitating Low-Carbon Choices in Tourism, Buildings and Food Systems – Guidance for Policymakers and Business Leaders (n.p., 2019).

C. Establish harmonized measurement systems

- 24. To establish harmonized measurement systems to track progress and identify best practices for circular tourism in the pan-European region, Governments can leverage the following guidelines for action:
- (a) Define harmonized indicators for circular tourism for the pan-European region by:
 - (i) Aligning the indicators as much as possible with internationally agreed statistical measurement frameworks (e.g., the System of Environmental-Economic Accounting or the Statistical Framework for Measuring the Sustainability of Tourism³⁵ (under development)), to enable data comparability that will allow benchmarking between regions, countries, destinations and over time;
 - (ii) Building upon general sustainable tourism indicators (e.g., those based on the Statistical Framework for Measuring the Sustainability of Tourism,³⁶ the European Tourism Indicator System or the Global Sustainable Tourism Council indicators);
 - (iii) Also building upon general circular economy indicators (e.g., the European Commission Monitoring Framework for the Circular Economy, the World Business Council for Sustainable Development Circular Transition Indicators);
 - (iv) Leveraging initial attempts to develop circular tourism indicators (e.g., the INCIRCLE project indicators);
 - (v) Involving key stakeholders in indicator development (e.g., the Global Sustainable Tourism Council and UNWTO);
 - (vi) Linking the indicators to existing policy initiatives (e.g., the Global Tourism Plastics Initiative);
 - (vii) Following the revised ECE Guidelines for the Application of Environmental Indicators;
- (b) Provide guidelines on how indicator systems can be further detailed for regions and for different tourism types to account for singularities and characteristics that cannot be equally measured;
- (c) Explore relevant internationally agreed statistical frameworks and their implementation by (national) statistical systems in order to identify data availability/gaps, (potential) sources, collection processes and infrastructure necessary for producing and organizing the data required to populate the identified indicators by: partnering with national statistical offices and systems; establishing a shared circular tourism information system across the pan-European region; making data publicly available and encouraging reuse; and defining data quality standards (e.g., following the SMART approach: specific, measurable, achievable, relevant and time-bound).

- 25. The Marine Debris Tracker application allows individuals to help track inland and marine litter, such as plastic pollution. The data collected are made publicly available on an open data platform for research purposes.³⁷
- 26. The European Tourism Indicator System for Sustainable Destination Management has been tested in over 100 destinations, including non-European Union destinations.³⁸

³⁵ See www.unwto.org/standards/measuring-sustainability-tourism.

³⁶ See https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-06/MST-Brochure.pdf.

³⁷ See https://debristracker.org.

European Commission, "European Tourism Indicators System for sustainable destination management", available at https://ec.europa.eu/growth/sectors/tourism/offer/sustainable/indicators en.

- 27. France is adopting an environmental footprint method to measure and communicate about the environmental performance of the accommodation sector across its whole lifecycle, relying on scientifically sound assessment methods agreed at the international level.³⁹
- 28. Evermore countries worldwide (Austria, Germany, Mexico, the Netherlands, the Philippines, Samoa, Saudi Arabia, etc.) are piloting implementation of the Statistical Framework for Measuring the Sustainability of Tourism.⁴⁰

D. Build resilience of circular tourism against multiple crises

- 29. To build resilience of circular tourism against multiple crises in order to ensure that progress in moving towards a circular tourism model is not reversed in the event of such crises, Governments can leverage the following guidelines for action:
- (a) Implement crisis management policies and mechanisms to ensure during a crisis that:
 - (i) Ad hoc needs of tourists and tourism businesses are met, especially collaborating with emergency services;
 - (ii) Stakeholders are aligned regionally and across regions;
 - (iii) Responsibilities in a crisis situation are clarified;
 - (iv) A clear communication and media strategy to tourism stakeholders, tourists and markets is established;
- (b) Establish resources to cushion the impact of crisis on tourism by, for example, providing specific funds able to partially compensate for a collapse in tourism demand (e.g., through job retention schemes, social protection, supplementary unemployment benefits) and to maintain critical infrastructure;
- (c) Build crisis warning systems across sectors and internationally to identify potential crises early on in order to be able to react more proactively. Signals might be found in a variety of fields (e.g., economic, environmental, health, politics etc.);
- (d) Leverage the transition towards a more circular tourism to diversify markets and tourism offers (e.g., by promoting cultural tourism beyond "sun and beach tourism").

- 30. Norway released a new national tourism strategy in May 2021, focusing on rebuilding the industry in a better, more sustainable way to help solve the climate crisis. The strategy calls for a more integrated perspective on tourism development. Under the strategy, the industry commits to a 50 per cent reduction in its climate emissions by 2030 (based on 2019 levels), and a 10 per cent reduction in annual transport emissions.⁴¹
- 31. In Spain, Benidorm has developed a Smart Destination+ Safe Benidorm Plan in response to the pandemic, with the aim of consolidating its image as a safe destination, while continuing to promote the sustainability of tourism in the municipality. The plan includes actions under the pillars of: (a) mitigating the environmental impact of tourism; (b) improving infrastructure, signage, accessibility and sustainability of tourism resources; (c) developing

³⁹ See https://librairie.ademe.fr/consommerautrement/4096-projet-de-pre-deploiement-de-laffichage-environnemental-des-hotels.html.

⁴⁰ See Experiences-from-pilot-studies-in-Measuring-the-Sustainability-of-Tourism.pdf (amazonaws.com).

⁴¹ Innovation Norway, *National Tourism Strategy 2030: Big Impact, Small Footprint* (n.p., 2021), available at

 $https://assets.simpleviewcms.com/simpleview/image/upload/v1/clients/norway/Nasjonal_Reiselivsstrategi_engelsk_red_c59e62a4-6fd0-4a2e-aea1-5e1c6586ebc6.pdf.$

tourism management, intelligent planning and diversification of tourism products; and (d) enhancing health and safety with risk management programmes and health protocols.⁴²

III. Promoting circular tourism on national and subnational levels

- 32. On a regional level, Governments need to coordinate with stakeholders to tackle the four following challenges in moving towards circular tourism:
- (a) Challenge 1 Insufficient infrastructure for circular tourism: It is critical on a regional level that the necessary infrastructure be established to allow for circular practices (water management, waste management, recycling facilities, environmental transportation, etc.). Governments need to establish adequate infrastructure as a foundation for circular tourism practices;
- (b) Challenge 2 Dependency on other sectors: The tourism industry is highly dependent of other sectors such as food, energy, water, buildings and construction, manufacturing, mobility, etc. Especially due to the service-oriented nature of the tourism industry and the predominance of small and medium-sized enterprises (SMEs) in tourism, tourism businesses often have only limited control over their value chain and are dependent on circular offerings from other sectors. Therefore, Governments need to accelerate the circular transformation of the other sectors closely interconnected with the tourism industry to enable the circular transition in the context of cross-sectoral dependencies;
- (c) Challenge 3 Lack of integration of circular principles and alignment of policies in the tourism industry: The tourism industry experiences impacts from a large variety of policy areas, in which a strong willingness to prioritize circular tourism on the political agenda is needed to tackle misaligned legislation, international policies that are not adapted to the regional context, inclusion of vulnerable groups, etc. Hence, Governments need to integrate circular principles into tourism-related legislation, policies, plans and strategies to ensure synergies on a governmental level;
- (d) Challenge 4 Misaligned tax and financial incentive systems: Most existing tax systems are not adapted for circular tourism (e.g., often, secondhand furniture is taxed the same way as brand-new furniture; only a few regions have adopted a green tourism tax). Furthermore, even though "circular" funds are often available (e.g., Horizon 2020, the programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME), etc.), SMEs in tourism report having neither the time to undertake, nor the understanding of, the complex administrative processes involved in accessing such funds, making them unreachable for most tourism businesses. Therefore, Governments need to align financial incentives and taxations with circular tourism to leverage market mechanisms to promote the transition.

A. Establish the adequate infrastructure

- 33. To establish the adequate infrastructure as a foundation for circular tourism practices, Governments can leverage the following guidelines for action:
- (a) Establish the necessary infrastructure for adequate water management, for example, by building wastewater treatment plants, especially near harbours and ports, to ensure treatment of water discharged from cruise ships and other touristic vessels;
- (b) Decarbonize tourism infrastructure and operations at the construction and operation phase (e.g., promoting use of low-carbon materials, as well as local materials and labour);

Organisation for Economic Co-operation and Development (OECD), "Managing Tourism Development for Sustainable and Inclusive Recovery", OECD Tourism Papers No. 2021/01 (Paris, 2021).

- (c) Transition to regenerative energy sources, for example, by investing in wind power plants or retrofitting facilities with solar panels; and by increasing energy efficiency, for example, by retrofitting facilities with energy-efficient appliances;
- (d) Establish the needed infrastructure for adequate waste management by, for example, building recycling facilities; and streamline waste management logistic chains;
- (e) Define infrastructure standards to be less vulnerable to more frequent extreme events;
- (f) Enable more sustainable transportation, for example, by building new and improved cycling networks; and strengthening public transport by, for example, increasing the frequency of trains and reducing prices;
- (g) Make infrastructure smart by combining physical and digital infrastructure for greater transparency and timeliness in decision-making.

Examples

- 34. In Germany, several public initiatives involving private sector co-participation in policy design are in place. These initiatives aim to harness the transition towards energy efficiency in hotel and restaurant businesses. The Check-in Energy Efficiency project was launched in 2015 to showcase the economic and social benefits of transitioning towards energy-efficient sources. This project requires hotels to implement at least one investment that will generate bottom-line energy savings of at least 30–50 per cent for heating and electricity as compared with energy consumption prior to the investment.⁴³
- 35. Denmark, France, Germany and Spain collectively invested \$28.1 billion in building upgrades and energy efficiency in 2020.⁴⁴
- 36. The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and its Protocol on Strategic Environmental Assessment provide a framework and guidance for assessing and reducing environmental impact in greening infrastructure.

B. Accelerate the circular transformation of other sectors closely interconnected with the tourism industry

- 37. To accelerate the circular transformation of other sectors closely interconnected with the tourism industry to enable the circular transition in the context of cross-sectoral dependencies, Governments can leverage the following guidelines for action:
- (a) For a given region, identify which sectors have the highest impact on the tourism industry's circularity (such as food, energy, water, buildings and constructions, manufacturing, mobility, etc.) and prioritize transformation efforts in those sectors;
- (b) Facilitate cross-sectoral communication and commitment, for example, by inviting hotel leadership and management to communicate openly on circular tourism ambitions, or by launching local vendor programmes that educate suppliers on hotel requirements and needs;
- (c) Promote the tourism industry to transit to circular models, for example, by highlighting job creation opportunities (e.g., local carpenters building circular hotels and furnishings; farmers supplying fresh produce to hotel restaurants offering agritourism activities; fishers delivering to restaurants and providing fishing excursions, etc.);
- (d) Promote circular procurement by, for example, setting up active procurement teams that research more circular supply opportunities; and by transforming food systems by

⁴³ OECD, OECD Tourism Trends and Policies 2018 (n.p., 2018), chap. 3.

⁴⁴ Brian J. O'Callaghan and Em Murdock, Are We Building Back Better? Evidence from 2020 and Pathways to Inclusive Green Recovery Spending (n.p., UNEP, 2021).

promoting regenerative farming and fisheries approaches that provide healthy diets and minimize food waste;

(e) Establish circular public education programmes to: increase tourism businesses' access to a circularity-skilled workforce market (circular-aware chefs, circular procurement specialists, etc.); support affected youth, labour and local communities by strengthening capacities and skills for the creation of green jobs and for micro-, small and medium-sized enterprises (MSMEs); and strengthen environmental democracy by empowering learners of all ages with the knowledge, skills, values and attitudes to address the circular tourism challenge.

Example

- 38. The European Commission consultation on the new Industrial Strategy demonstrated how essential cross-stakeholder collaboration is in achieving 2030 Agenda targets.⁴⁵
- 39. An International Finance Corporation pilot programme aims to increase Fijian hotels' ability to purchase locally grown produce by streamlining procurement systems, improving promotion of "farm-to-fork" content to guests and increasing market linkages. 46

C. Integrate circular economy principles into tourism-related legislation, policies, plans and strategies

- 40. To integrate circular principles into tourism-related legislation, policies, plans and strategies to ensure synergies on a governmental level, Governments can leverage the following guidelines for action:
- (a) Establish a guiding vision of circular tourism in the regional context to align key stakeholders by leveraging best practice approaches (e.g., integrated coastal zone management, ecosystem-based management principles, life cycle assessments of natural infrastructure etc.) and by including key stakeholders in the development process;
- (b) Align with and commit to national policies (e.g., national targets for biodiversity, climate, resource efficiency, pollution prevention, etc.) and international policies (e.g., the New Plastics Economy Global Commitment, the Global Tourism Plastics Initiative, the Environment for Europe process, the Batumi Initiative on Green Economy); and include circular tourism perspectives in crisis recovery packages and plans (e.g., pandemic recovery plans);
- (c) Place the transition towards circular tourism high on the political agenda, for example, by making circular transition a priority with trackable goals and an allocated budget, ensuring technical support from specialized agencies where necessary;
- (d) Foster collaboration and coordination between government departments and agencies working within the tourism industry and in different areas of the tourism value chain (e.g., transport, agriculture, fisheries, etc.);
- (e) Include society in the transition, for example, by promoting public and private initiatives to restore and enhance the capacity of ecosystems used as tourist attractions to deliver their infrastructural and ecological functions; by including vulnerable groups (e.g., youth, migrants, ethnic minorities and indigenous communities) to reach consent on any tourism actions that affect them and to establish equitable employment opportunities.

Examples

41. The Glasgow Declaration on Climate Action in Tourism was launched in November 2021 at the twenty-sixth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (Glasgow, United Kingdom of Great Britain and

⁴⁵ Xavier Font and others, Transition Pathways for Tourism October 2021, European Commission.

⁴⁶ International Finance Corporation, From the Farm to the Tourist's Table: A study of fresh produce demand from Fiji's hotels and resorts (n.p., 2018).

Northern Ireland, 31 October–12 November 2021) urging all travel and tourism stakeholders to unite in transforming tourism to deliver effective climate action.⁴⁷

42. The Global Tourism Plastics Initiative has defined "Recommendations for the tourism industry to continue taking action on plastic pollution during recovery from COVID-19", which were developed within the framework of the One Planet Sustainable Tourism Programme.⁴⁸

D. Align financial incentives and taxation with circular tourism

- 43. To align financial incentives and taxation with circular tourism to leverage market mechanisms to promote the transition, Governments can leverage the following guidelines for action:
- (a) Implement tourism taxes (e.g., eco-tax, visitor fees) and ensure that tax incomes are allocated to circular tourism development;
- (b) Establish financial incentives to encourage and reward the transition to a more circular tourism model, for example, by supporting nature-based climate solutions and carbon sinks that may have significant economic, social and environmental benefits for tourismreliant countries, or by promoting investments towards lower emission fuel types;
- (c) Review and abolish harmful subsidies, for example, subsidies for outdated technologies or polluting sectors (e.g., aviation, cruise ships, etc.);
- (d) Provide public subsidized loans with easy access especially to finance upfront costs of moving towards circular tourism for SMEs (e.g., to upskill the workforce, retrofit assets, etc.) and leverage market-based loans (targeting green lending, alternative loan structures, and property-linked efficiency loans), (partial) credit guarantees, and insurance for sustainable tourism assets);
- (e) Facilitate private investments in circular tourism, for instance, by adjusting erratic, rigid regulations that create barriers to entry for innovators wishing to introduce new circular tourism products, processes or organizational models.

- 44. In Austria, the "klimaaktiv mobil" programme provides €80 million in subsidies to ease green mobility transition (e-mobility, mobility management, promoting bicycle and pedestrian traffic, and flexible public transport and car-sharing). The programme supports firms, local government and civil associations by meeting up to 20 per cent of project funding costs. While the coverage of the initiative is wider than tourism, it offers a funding bonus to incentivize regional mobility projects led by tourism associations.⁴⁹
- 45. In Spain, an eco-tax of €2 per night was introduced on all overnight stays in the Balearic Islands in 2016, including in hotels and holiday rentals and on cruise ships and campsites. The tax revenue is used to finance investments to maintain and improve tourism quality on the islands and better manage the territorial and environmental impact, among other things.⁵⁰

⁴⁷ See www.oneplanetnetwork.org/sites/default/files/2021-11/GlasgowDeclaration EN 0.pdf.

⁴⁸ See www.oneplanetnetwork.org/programmes/sustainable-tourism/global-tourism-plastics-initiative/covid-19.

⁴⁹ OECD, OECD Tourism Trends, chap. 3.

⁵⁰ Ibid.

IV. Promoting circular tourism among the business community

- 46. Governments need to collaborate with tourism businesses to tackle the four following challenges in moving towards circular tourism:
- (a) Challenge 1 Businesses find it difficult to transition towards a circular tourism model: The large volume of interconnected and interdependent small operators, collaborating over many layers and involving public as well as private stakeholders, makes industry-wide application of circular tourism challenging. Single businesses willing to move towards a more circular tourism model find it difficult to convince their ecosystem to join the transition, and often lack the resources and expertise required to embark on the transition. Furthermore, a critical mass of tourism offerings needs to be achieved to become relevant for tourists. Hence, Governments need to support businesses in adopting circular tourism principles to reach a critical mass of circular tourism offerings to attract tourists;
- (b) Challenge 2 Tourist demand and behaviour weakly aligned with circular tourism: Even though tourists affirm the importance of more sustainable tourism models,⁵¹ tourism businesses report that tourists remain unwilling to pay for more circular tourism offerings, and reluctant to change their behaviours for more sustainable practices.⁵² Changing tourist behaviours represents a huge challenge, but is also a needed prerequisite to convince tourism businesses at scale to enter circular tourism. Therefore, Governments need to collaborate with businesses to change tourist behaviour, in order to reach a critical mass of circular demand to attract tourism businesses;
- (c) Challenge 3 Problem of reaching a critical mass from the supply and demand side: On the one hand, tourism businesses are often hesitant to invest in the transition towards a more circular tourism model before witnessing a strong demand. On the other hand, tourists require attractive circular tourism offers before engaging in this new form of tourism. Instead of overcoming this "chicken and the egg" problem by transforming the whole tourism model at once, a network-effect strategy is needed to reach critical masses of supply and demand in specific networks. Network effects in this context means, on the demand side, that focusing on a cluster of tourists allows for positive spillovers of word-of-mouth and peer influence, and, on the supply side, that each additional circular tourism destination increases the attractiveness of the offering ecosystem for tourists while offering synergy effects (especially of learning and in procurement) between the tourism destinations joining the network. Thus, Governments need to promote an ecosystem of circular tourism to leverage network effects to overcome this problem;
- (d) Challenge 4 Insufficient circular innovations: To ease the transition towards a circular tourism model, innovation driven by technological advancements plays a central role. For instance, leveraging data-driven innovations has the potential to provide transparency for circular decision-making (assessing lifetime values of materials) and for automation (e.g., by making refurbishing an economically viable option). Governments need to promote circular innovation and digitalization to provide additional levers for businesses to move towards a more circular tourism model.

A. Support for businesses in adopting circular tourism principles, including through voluntary mechanisms and beyond financial aid

- 47. To support businesses in adopting circular tourism principles, including through voluntary mechanisms and beyond financial aid, to reach a critical mass of circular tourism offerings to attract tourists, Governments can leverage the following guidelines for action:
- (a) Encourage tourism businesses to be amongst the first to move towards a circular tourism model by advertising the benefits of first-mover businesses (e.g., higher revenue streams by addressing new market opportunities and models such as asset sharing

⁵¹ Booking.com, "Booking.com's 2021".

⁵² Martínez-Cabrera and López-del-Pino, "The 10 Most Crucial".

and recirculation, lower operating costs through resource optimization and higher staff retention, benefits for brand value, etc.);

- (b) Provide advisory services, guidance and technical assistance to MSMEs to: support the decision-making process to engage in the transition; provide guidance on how to efficiently integrate circular principles; explain how to benefit from governmental financial and non-financial support; and help conduct circular business model innovation (e.g., new consumptions models such as couch surfing, new value retention models such as "pay-as-you-use", etc.) to systematically change the value proposition, creation and retention logic of tourism players;
- (c) Orchestrate cooperation along the value chain, for example, when launching new circular business models that require deep supply chain cooperation between businesses, suppliers (including waste service providers), regulators and local authorities (towards a circular tourism);
- (d) Offer training to staff to promote a skilled workforce for the transition towards the new model of tourism;
- (e) Communicate openly about "best in class" businesses and collaboration challenges to help overcome barriers and convince businesses to join the transition.

Examples

- 48. UNEP and UNWTO are working with business signatories (with a combined annual revenue of over \$43 billion) of the Global Tourism Plastics Initiative to tackle the challenge of plastic pollution. Specific commitments and guidance have been created to increase circularity in the use of plastics, requiring signatories to commit to the elimination of plastics from areas of their operations or to the transition towards reuse business models.⁵³
- 49. The UNWTO-led Glasgow Declaration on Climate Action in Tourism⁵⁴ represents a global community of over 600 organizations that have become signatories thereto and have committed to supporting the global goals of halving global emissions by 2030 and achieving net zero by 2050, as well as to developing climate action plans aligned with the following pathways: measurement of emissions; decarbonization of tourism; regeneration of ecosystems; collaboration on, as well as financing and implementation of, climate plans; and reporting publicly on progress on an annual basis. The Glasgow Declaration is implemented within the framework of the One Planet Sustainable Tourism Programme and in collaboration with the Travel Foundation.

B. Collaborate with businesses to change tourist behaviour

- 50. To collaborate with businesses to change tourist behaviour in order to reach a critical mass of circular demand to attract tourism businesses, Governments can leverage the following guidelines for action:
- (a) Launch public campaigns and support businesses to launch tourist awareness, education, and marketing campaigns to invite tourists to design their vacation more carefully by rethinking:
 - (i) Distance to the destination (selecting tourism destinations that are closer to tourist accommodation can drastically reduce carbon footprint);
 - (ii) Duration of stay (fewer but longer stays throughout the year reduce the need for additional travel);
 - (iii) Moment of stay (travelling off-season to reduce infrastructure needs and distribute the burden on ecosystems to allow for recovery);

⁵³ See www.oneplanetnetwork.org/programmes/sustainable-tourism/global-tourism-plastics-initiative.

⁵⁴ See www.oneplanetnetwork.org/programmes/sustainable-tourism/glasgow-declaration.

- (iv) Type of tourism (opting for less polluting tourism activities such as "slow tourism", e.g., walking, cycling, etc.);
- (v) Mode of transport (leveraging more environmentally friendly means of transport (e.g., rail) and leveraging transportation-sharing platforms (e.g., BlaBlaCar);
- (vi) Personal behaviour (e.g., avoiding food waste during breakfast);
- (vii) Type of accommodation (opting for more circular accommodation or leveraging accommodation-sharing platforms such as Ecobnb);
- (b) Providing tourist information tools for tracking circularity of personal tourism choices (e.g., calculating CO₂ footprint), creating transparency of circularity of different tourism offers (e.g., circular tourism certificates of hotels), and establishing incentives for tourism businesses to actively communicate their circular ambitions and progress;
- (c) Rewarding circular tourism behaviour and creating tourist peer pressure, for instance, by leveraging social media (e.g., "Instagramable" rewards that tourists would like to share), or creating circular tourism events (e.g., festivals).

Example

51. The Hôtel Amiral (Nantes, France) piloted procurement of unbleached bed linen and microfibre towels, an innovative solution to reduce negative life cycle impacts and linen and towel costs developed by a group of stakeholders in the textile value chain within the hospitality industry. Consumer perceptions were collected via a survey. Guests demonstrated strong acceptance of unbleached bed linen. The satisfaction rate dropped if the guests were not informed of the rationale behind the choice of unbleached fibres and its potential impacts, highlighting the importance of consumer information and transparency.⁵⁵

C. Promote a network of circular tourism

- 52. To promote a network of circular tourism, Governments can consider the following guidelines for action:
- (a) Instead of trying to transform the whole tourism industry at once, create a coalition of destinations willing to move towards circular economy. Ensure that the selection of destinations creates a portfolio of attractive destinations for tourists and that offers synergy effects (especially of learning and in procurement) between the tourism destinations joining the network;
- (b) As a coalition, identify tourist clusters that are characterized by a high probability of valuing circular tourism offerings and a strong network strength (strong word-of-mouth and peer influence);
- (c) Systematically invest in critical areas to speed up each destination's circularity, by leveraging a value chain and hotspot analysis per destination and focus funds on boosting the circularity of the pilot destinations. "Food and beverages", "built environment" and "plastics" could be priority areas for the integration of circular approaches into the tourism industry due to their centrality to the tourist experience, their related environmental impacts, including material and carbon footprints, and their potential to influence the transformation of the sector and position tourism as an agent of change;
- (d) Advertise as a coalition of circular pilot destinations to persuade targeted tourist clusters that a critical mass of tourism offers has been established and to opt for circular tourism experiences versus traditional offers;

www.oneplanetnetwork.org/sites/default/files/embedding_circularity_in_procurement_of_linen_in_fr ance_2.pdf.

(e) Leverage pilot tourism destinations as living laboratories to advance the stillimmature understanding of circular tourism and foster knowledge exchanges with other sectors to position tourism as a promoter of the circular transition.

Examples

- 53. The Regional Action Plan on Sustainable Consumption and Production in the Mediterranean is a common regional action framework towards sustainable consumption and production in the Mediterranean. The contracting parties thereto are committed to applying the ecosystem-based approach for sustainable tourism. ⁵⁶
- 54. CIRCULAR STEP (Stakeholder Engagement Platform) is a platform for policy dialogue to bring together all 56 ECE member States in the circular economy transition to facilitate exchanges of experience.⁵⁷
- 55. CEnTOUR Project is a European Union COSME project that aims to support tourism SMEs across five European countries. Among other things, the project has developed a database of best practices implemented by SMEs.⁵⁸
- 56. The Cyprus Sustainable Tourism Initiative⁵⁹ was established to promote the development of a sustainable approach to tourism in Cyprus. It aims to harness tourism demand (tour operators, agents) with the supply of tourism resources (small producers and their communities) to provide a clear economic benefit while minimizing adverse socioeconomic and environmental impacts.

D. Promote circular innovation and digitalization

- 57. To promote circular innovation and digitalization in order to provide additional levers for businesses to move towards a more circular tourism model, Governments can leverage the following guidelines for action:
- (a) Foster communication across the value chain to identify innovation needs, for instance, by organizing circular tourism entrepreneurship fairs involving up- and downstream suppliers and buyers, taking a holistic view of the entire product or service lifecycle demands; and launching new industry partnerships, as well as public-private collaborations;
- (b) Promote a circular tourism entrepreneurship culture by establishing pitch nights and hackathons; building online platforms for training, assessments, capacity-building, and other useful resources connected to sustainable tourism; and by supporting travel technology incubators, accelerators and mentoring opportunities;
- (c) Work with sectoral bodies and local networks to engage SMEs and the tourism workforce in developing their digital capacity, for instance, by establishing the framework conditions to support digitally enhanced tourism business models, value chains and ecosystems, with policy measures including support for hands-on innovation and capacity development;
- (d) Investing beyond digitalization in data- and artificial intelligence-driven innovation to unlock the technologies' potential to provide transparency for circular decision-making (e.g., assessing lifetime values of materials) and for automation (e.g., by making "closing the loop activities", such as refurbishing and remanufacturing, economically viable options).

⁵⁶ See https://wedocs.unep.org/bitstream/handle/20.500.11822/20731/unepmap_SCPAP_eng_web.pdf? sequence=1&isAllowed=y.

⁵⁷ See https://unece.org/media/Circular-Economy/press/366382.

⁵⁸ See https://circulartourism.eu.

⁵⁹ See https://csti-cyprus.org/.

Examples

- 58. The Sustainable Tourism Interreg MED horizontal projects promote technologies and big data to support more sustainable tourism (e.g., the HERIT-DATA project).⁶⁰
- 59. The European Union Urban Waste project offers waste reduction applications to tourists and tourism service providers, which can be leveraged as first pilots to build upon. 61
- 60. The FACET project aims to facilitate and increase the adoption of circular solutions in the tourism industry by supporting entrepreneurs in shifting from linear to circular.⁶²
- 61. In Spain, the Ministry of Energy, Tourism and the Digital Agenda introduced a grant initiative that allocates €60 million to fostering uptake of digitalization and energy efficiency by using information communications technology in local tourism destinations.⁶³

V. Conclusion

- 62. Applying circular economy principles has the potential to significantly improve the sustainability of the tourism industry to ensure that the industry can continue to be one of the main drivers for economic and social welfare while reducing the burden of the industry on the environment.
- 63. Governments need to collaborate with one another across the pan-European region by: developing a guiding vision based on a science-based understanding that serves as a compass for stakeholders to jointly develop a more circular tourism model; defining shared standards to harmonize practices along the tourism value chain to unlock synergies (e.g., economies of scale through harmonized circular procurement standards that suppliers can follow across the pan-European region); fostering the establishment of harmonized measurement systems to allow for progress in moving towards a more circular tourism model to be tracked and to identify best practices; and leveraging the transition towards a more circular tourism model to build resilience of the tourism industry against crises.
- 64. At the subnational and national levels, Governments need to strengthen interministerial collaboration and work with various stakeholders to promote transition towards a circular tourism model. Governments need to: establish the required infrastructure for circular tourism adapted to local tourism requirements; accelerate the transition towards circular economic models of the other sectors closely interconnected with the tourism industry, as tourism is highly dependent on other sectors and cannot become circular by itself; integrate circular principles into tourism-related legislation, policies, plans and strategies; and align financial incentives and taxation with circular tourism to leverage market mechanisms for the promotion of the transition towards a more circular tourism model.
- 65. Lastly, Governments need to collaborate with tourism organizations. Governments need to: support tourism businesses in their adoption of circular principles to reach a critical mass of circular tourism offerings in order to convince tourists to opt for circular, rather than conventional, tourism; collaborate with businesses to change tourist behaviour in order to establish an attractive market convincing tourism businesses to move towards a more circular tourism model; promote the establishment of a network of pilot circular tourism destinations that focus on attract specific tourist clusters to overcome the demand-supply side "chicken-and-the-egg" problem, rather than trying to change the whole tourism industry at once; and promote circular innovation and digitalization to provide additional levers for businesses to move towards a more circular tourism model.

⁶⁰ See https://sustainable-tourism.interreg-med.eu/special-pages/projects/search-projects/fiche/11/70/.

⁶¹ See www.urban-waste.eu/project/.

⁶² See https://www.interreg2seas.eu/en/FACET.

⁶³ OECD, OECD Tourism Trends, chap. 3.