



INSPIRES
RESILIENT TOURISM

Session 1: Introduction to circular economy in tourism



Contents

- The aim of this session is to explore the concept of circular economy and its main characteristics in tourism. It features circular tourism as a response to the challenges related to resource use and waste production in the tourism industry.
- Keywords: circular tourism, resource use, resource-efficiency, circular tourism principles

Tourism and resource use

- By 2050, it is estimated that we will need three planets to provide the sufficient natural resources required by our current linear economic model.
- Tourism as an industry puts pressure on local resources caused by the industry's resource use and waste production.
 - The operations of the tourism industry are based on **the use of large amounts of materials; the industry consumes a lot of energy and water and produces waste.** A hotel resident produces about a kilo of waste per day and uses four times more water than a local resident. About 10–30 percent of the food in restaurants ends up as waste every day.
 - Estimates suggest that tourism is responsible for **8% of CO2 emissions globally.** Tourism consumption has increased globally to the point that it is unsustainable and contributes to climate change.
- The negative impacts highlight the need to shift towards circular economy in tourism

Resource-efficiency in tourism

- Resource-efficiency in tourism means **maximising the value and benefits derived from resources** (such as energy, water, materials, and food) used in tourism operations, while **minimising waste, emissions, and ecological degradation throughout the tourism value chain.**
- **The main themes are:**
 - Energy and water efficiency
 - Waste prevention and minimisation
 - Sustainable material use
 - Optimised transport

Definition of circular economy

- In general, circular economy is an economic model that aims at **an in-depth transformation of the way resources are used**; resources are reused and kept in a loop of production and usage.
- In other words, **it is a system-level production and consumption model of economy** and an antonym of a linear economy. It is a systemic transformation that involves **transforming production, services and consumption**.
- Consumption is based on **the use of services rather than ownership**: sharing, renting, and recycling. The circular economy **changes the way we use resources**: resources are reused and remain in loop.
- Circular economy describes an economic system, based on business models which replace the end-of-life concept with reducing, alternatively reusing, recycling and recovering materials in production/distribution and consumption with the aim to accomplish sustainable development (Kirchherr et al. 2017).
- It is an economy based on resource-efficiency with a mission to save resources by maximising efficiency and minimising their wastage (Sheldon 2022).

Linear, recycling and circular model comparisons

Linear Economy Model

- The linear economy follows a take-make-dispose approach, relying heavily on finite resources and generating waste.

Recycling Economy Model

- Recycling economy reduces waste by reintroducing materials but still depends on new resource extraction.

Circular Economy Model

- Circular economy promotes reuse, repair, and recycling to minimise waste and conserve resources sustainably.

Circular economy is a tool for tourism companies



Sustainability is the goal - circularity is a tool to achieve sustainable development.



It brings positive environmental impacts by increasing resource-efficiency. It reduces the use of raw-materials, energy and water consumption.



Circular economy offers new ways of doing business and opportunities for business growth. It provides cost savings and improves brand image as well as customer loyalty.



It also provides new opportunities for collaboration between different actors in the value chain. The collaboration stimulates innovation, thinking outside the box.

Asset-heavy vs. asset-light tourism actors



- Each tourism sector and actor makes a different circular transformation based on the characteristics of their business.
- For this reason, Einarsson and Sorin (2020) has defined two types of tourism actors:
 - **Asset heavy businesses operate physical assets.** These include accommodation, restaurants, transportation companies. In circular transformation, their focus is on avoiding waste, extending and optimising material and asset use. Collaboration with the supply chain is essential to achieve this.
 - **Asset light businesses deliver non-tangible services.** These include e.g., travel agencies and distributors. They contribute mostly on circular economy by marketing, dialogue and raising awareness with customers and destinations.

Key principles of circular tourism

1. Design out waste and pollution

- Use durable, reusable products (e.g., refillable toiletries, reusable tableware)
- Avoid single-use plastics and packaging

2. Keep products and materials in use

- Extend the life of equipment, furnishings, and buildings
- Encourage reuse, sharing, and repair (e.g., furniture, uniforms, electronics)

3. Regenerate natural systems

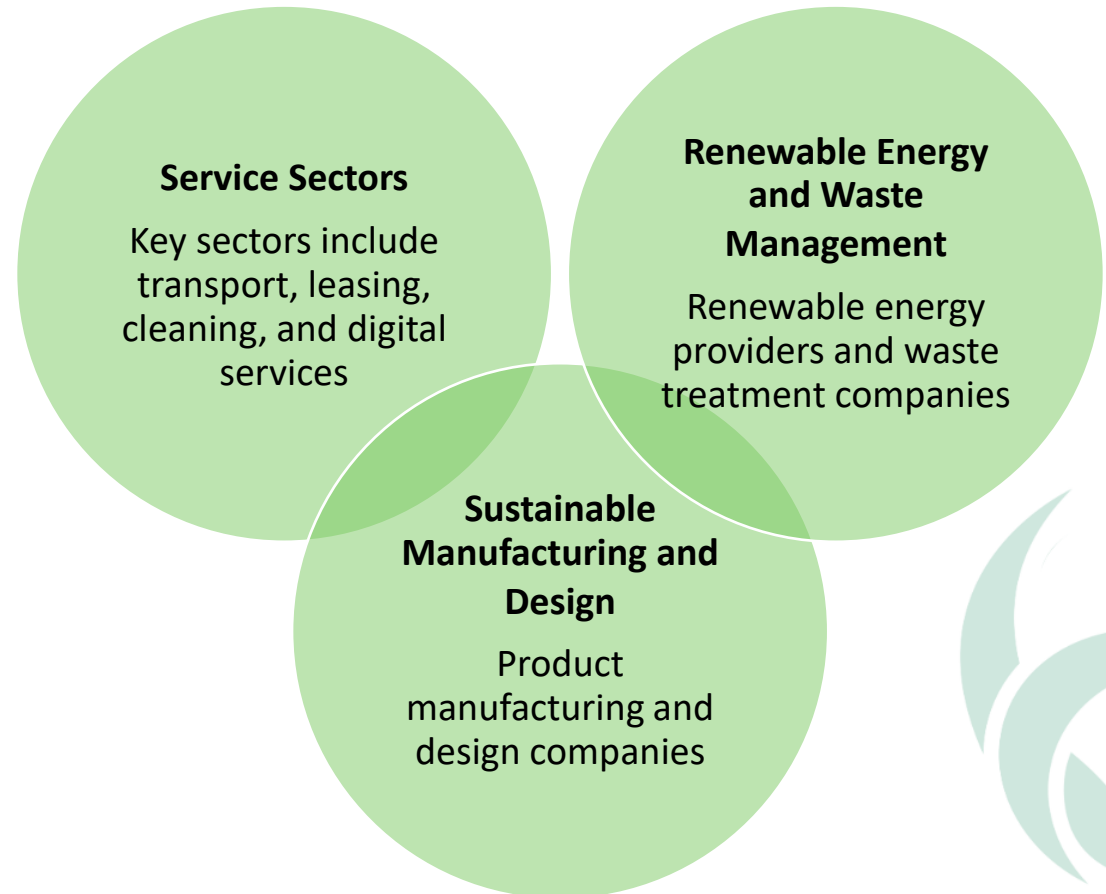
- Support nature-positive, regenerative tourism (e.g., composting, local food, biodiversity protection)
- Use renewable energy and reduce carbon emissions

4. Support local and circular supply chains

- Partner with local businesses that follow circular practices
- Source locally produced, seasonal, or second-hand goods

Collaboration

- Circular economy requires a **network approach**, and circular transition cannot be achieved without collaboration and shared objective.
- Collaboration *enables and ensures the efficient use of resources.*
 - It is necessary to understand the connection between tourism and other industries and how to connect with local actors.



Circular procurement

- The strategic purchasing of products, materials, and services to support a circular economy is also important.
- **Choose circular suppliers:** Work with suppliers that use recycled or renewable materials, take back products after use, or provide services (e.g. leasing) instead of selling goods. Choose bulk items with minimal or no packaging.
- **Durability and reparability:** Procure products that last longer, are easy to maintain, and can be repaired or upgraded (e.g. furniture, IT equipment, uniforms).
- **Shared services:** Collaborate with nearby tourism companies to share resources like shuttle services or waste management systems.
- **Green procurement policies:** Follow any national or EU-level green public procurement (GPP) criteria that may apply.

Circular practice examples in accommodation

- Switching to renewable energy, sorting and recycling waste and reducing water consumption
- Recycling of furniture and textiles and utilisation of recycled materials in bedding and towels, replacing single-use packaged toiletries with durable packaging/dispensers and reducing the use of plastic in these
- Maximising the use of accommodation facilities during the low season for purposes other than accommodation



Co-funded by
the European Union

This project receives funding from the European Union's
SMP Programme under Grant Agreement No 101181590.



Circular practice examples in restaurants

- Sustainable procurement for raw materials and reducing food waste
- The raw materials are bought from local producers, fishermen, hunters and berry growers, or these can be grown yourself.
- Old products with a best-before date in stores can also be used as raw materials.
- It is essential to create healthy portions of local seasonal foods, to offer a wider variety of portion sizes or fewer options on the menu, and to increase consumer awareness of food waste.
- Reducing plastic waste and recycling packaging waste.
- Utilisation of digital platforms in selling surplus food to consumers.
- Companies can purchase used furniture, dishes and cutlery.
- It is possible to make work clothes and restaurant textiles from recycled material



Co-funded by
the European Union

This project receives funding from the European Union's
SMP Programme under Grant Agreement No 101181590.

Summary

- In circular economy, there is NO concept of waste.
- Circular economy is about preventing waste and keeping it in the loop of production and consumption.
- Circular economy is a tool for tourism destinations and companies to increase sustainability of their actions.
- Each tourism sector makes different circular transformation – this depends on the characteristics of their operations.

Activities

Reflect: Business case

- In the attachment, you will find a business case about a circular restaurant.
- Read the case and reflect the following questions:
 - What kind of resources are saved by maximizing resource-efficiency in this case restaurant?
 - What are the main circular practices this restaurant has adopted? How can you conclude this?

References

- Einarsson S. & F. Sorin (2020). Circular Economy in travel and tourism: A conceptual framework for a sustainable, resilient and future proof industry transition. CE360 Alliance.
- Kirchherr, J., Reike, D. & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions”, Resources, Conservation and Recycling, 127, 221–232.
- Kurtagic (2018). Circular economy in tourism in South East Europe.
- Sheldon, P. J. (2022). The coming-of-age of tourism: embracing new economic models”. Journal of Tourism Futures, 8, 2, 200–207.
- World Economic Forum. (2022). 5 circular economy business models that offer a competitive advantage.



INSPIRES

RESILIENT TOURISM

*Stay
tuned!*



inspires-tourism.eu



linkedin.com/company/inspires/



facebook.com/INSPIRES-TOURISM



Co-funded by
the European Union

This project receives funding from the European Union's
SMP Programme under Grant Agreement No 101181590.

