

**Whitepaper**

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# Circular Tourism and support from local authorities

How local authorities can support small-medium size tourism enterprises in coastal destinations in six strategic steps



# Colophon

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# Circular Tourism and support from local authorities

How local authorities can support small-medium size tourism enterprises in coastal destinations in six strategic steps



## Introduction

Many small-medium size tourism enterprises (SMEs) are in coastal areas where their transition to more sustainable operations is often hampered by high levels of seasonality, a degree of physical remoteness from other urban areas and limited accessibility to both useful infrastructures to be adapted to new standards and to innovation. Yet, their sustainability and long-term viability are essential because they bring strong and long-established economic and social benefits to coastal communities. In coastal destinations, there is, therefore, an urgent need for support to further enhance their sustainability and remove the barriers that are faced by tourism SMEs. In response, the circular economy is increasingly seen as a promising approach to more sustainable and resilient coastal tourism.

The 2 Seas is a well-known coastal tourism region attracting millions of visitors every year. It includes coastal areas in France, England, the Netherlands, and Belgium. Yet, while tourism brings economic benefits for their regions, it also puts pressure on resources and local infrastructure, especially because of the seasonal character of their tourism economy.

**Some sustainability challenges faced by coastal destinations include:**

### Box 1. Sustainability challenges in coastal destinations

## Sustainability challenges in coastal destinations

- **Resource scarcity:** coastal destinations often face scarcity in available resources (e.g., water). In highly seasonal destinations, peaks in resource consumption put these resources under pressure and can reduce community accessibility to them. Therefore, ways to minimise tourism pressure on scarce resources are crucial in coastal destinations and beyond. Tourism's seasonality is, therefore, a challenge, and has been for a long time.
- **Tourist infrastructure development:** some coastal destinations have inherited old buildings and infrastructure, which are not optimised in terms of environment and social terms. New ways to build responsibly, repurpose and optimise existing buildings, and build from sustainable materials are essential to minimise the demand for more coastal land and building resources.
- **Waste management:** coastal destinations are often under pressure from high levels of waste generation from tourism activities: they often lack the human and infrastructure capacity to manage waste. New approaches are needed to minimise avoidable waste and valorise unavoidable waste.
- **Narrow economic specialisation:** coastal destinations are often characterised by narrow economic specialisation – mostly focusing on tourism – and are therefore highly vulnerable to socio-political, natural and health shocks. New sustainable development models are needed that are inclusive in the sense that focus on diversifying the local socio-economic landscape in addition to environmental sustainability.



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Mainstreaming circular tourism practices in the 2 Seas region (and in other coastal destinations) can help mitigate many of the sustainability challenges faced by coastal tourism. In line with such needs, the 2 Seas Interreg FACET project (Facilitating the Adoption of Circular Entrepreneurship in the Tourism and Leisure Sector) has implemented several strategies to support coastal tourism entrepreneurs in the 2 Seas areas of France, the Netherlands, Belgium, and England to adopt circular solutions that are tailored to their context and needs, as well as that can be replicated elsewhere.

During this process, the 2 Seas Interreg FACET project worked together with several local authorities in enabling a new circular economy in the tourism sector. Local authorities, such as municipalities and county and district councils, can play a paramount role in accelerating the transition to circular economies in tourism destinations. They can enhance their support by not only adapting their regulatory frameworks to the new needs of a circular economy but also by establishing and facilitating the necessary partnerships within and among destinations to stimulate circular approaches and innovation.

Based on the implementation of the 2 Seas Interreg FACET project, a Six-step Strategic Framework for local authorities has been developed. It is an experience-based guidance framework to inform other local authorities within the 2 Seas region and beyond about how they can enhance their support for a circular economy in their coastal tourism destinations.

## The purpose of this white paper

This white paper proposes a guidance framework for the local authorities operating in coastal destinations in the 2 Seas region and elsewhere to support the tourism sector – and especially small-medium enterprises - in adopting circular economy solutions. In the white paper, a **Six-step Strategic Framework** for local authorities is recommended which was developed from experience gained throughout the FACET project and stakeholder consultations. The **Six-step Strategic Framework** seeks to guide local authorities in creating a conducive environment for tourism entrepreneurs to adopt circular economy practices.

The framework for local authorities will be presented along with practical insights from the FACET project. It aims at informing local authorities in the 2 Seas area and other local authorities operating in other coastal destinations. The versatility of the framework allows its easy adaptation to other destinations (e.g., city destinations) and other sectors too.

Moreover, while the recommendations provided throughout this white paper are particularly focused on supporting small-medium enterprises (SMEs) in the tourism sector, the framework can also be adopted by the local authorities in destinations characterised by the predominant presence of large tourism enterprises (e.g., resorts). However, focusing on SMEs was deemed relevant because of their predominance in the sector and the wide range of barriers that they tend to face in adopting a circular economy given their size and internal capacity.

## Structure of the white paper

This white paper *firstly* introduces the concept of the circular economy and summarises the policy landscape of the 2 Seas region, and then outlines its relevance for the tourism sector – and coastal tourism destinations - of shifting from linear to circular practices. Secondly, this white paper, introduces the **Circular Economy Ladder for Tourism Entrepreneurs** developed during the FACET project with a summary of the obstacles faced by tourism entrepreneurs seeking to adopt a circular economy approach. Thirdly, it presents the **Six-step Strategic Framework** – step-by-step – supported by practical examples of circular tourism best practice cases from the FACET project and elsewhere.

# 2

## A circular economy in coastal destinations

The circular economy is an increasingly important topic on agendas worldwide and adopted by many businesses across many industries. The basic concept is to migrate from the current linear system of production and consumption to one which focuses, firstly, and where possible, on refusing products and materials, secondly, on rethinking production and consumption by designing for a circular economy and service sharing, and thirdly, reducing the utilisation of products and the overall demand for materials.

In the current economic system, too many materials are used, leading to the over-exploitation of natural resources, and unmanageable waste generation. The circular economy, in response, can reduce material inputs into the economic system by finding alternative production and consumption solutions, and alternative uses for waste products.

The circular economy has been defined as “an economic system that replaces the end-of-life concept with **reducing, reusing, recycling, and recovering materials in the production, distribution and consumption processes**” (Kirchherr et al., 2017, pp. 224).

### Linear economy



### Circular economy



Figure 1. From Linear to a Circular Economy

In the 2 Seas region the circular economy has been given significant importance from the policy perspective. This is evidenced by the development of circular economy policies in the 2 Seas countries involved in the 2 Seas Interreg FACET project. These policies are summarised in the next section to also position the white paper within the policy landscape.

## Current circular economy policies in the 2 Seas area

**This white paper, as it emerges from the 2 Seas FACET Interreg project, is positioned within the 2 Seas policy landscape. Policies regarding the circular economy are found at different levels, but only a few have a specific emphasis on the tourism sector.**

The EU launched its first [Circular Economy Action Plan](#) in 2015 which was revised in 2018 and 2020. The 2015 Action Plan included 54 actions that have been delivered or are under implementation. The actions in the 2018 Action Plan form a core part of the EU Green Deal (2020). The [EU Green Deal](#) is connected to the [NextGenerationEU recovery plan](#) from the COVID-19 pandemic, with a third of the relevant funds allocated to the Green Deal.

Areas with significant circular potential include packaging; plastics; textiles; construction and buildings; and food. However, the impact on the tourism and leisure sector is not specifically considered in the EU Circular Economy Action Plan (the plan only refers to tourism regarding outlying islands).

Drawing from the EU's broad effort, each country in the 2 Seas region has developed its circular strategy. Although the recommendations in this white paper are not solely addressed to the 2 Seas region, Table 1 contextualises the white paper from a regulatory perspective by summarising main circular strategies developed by each country involved in the FACET project.

**Focus is given to food waste and food packaging, and construction circularity that is directly relevant to the tourism sector and relevant for local authorities in coastal destinations.** Local authorities must refer to broader strategies and align them with the destination's actions for a circular economy in tourism.

## Policy/Regulations

### France:

- The [Circular Economy roadmap of France](#) details 50 measures for achieving a circular economy through operational implementation by all stakeholders. The roadmap aims at a 50% reduction in the amount of non-hazardous waste landfilled by 2025, compared to 2010; 100% of plastics recycled by 2025; 30% reduction in resource consumption in relation to GDP between 2010 and 2030; avoid the emission of 8 million additional tonnes of CO2 each year; and create up to 300,000 additional jobs.
- The [Anti-Waste for a Circular Economy Law](#) in 2020 (loi AGEC), aims at reducing household waste, waste from economic activities, single-use plastic, food waste and illegal waste disposal. The law includes prohibitions to fight food waste and single use plastic, while it also extends the powers of mayors to combat littering.
- [Loi Egalim](#) (2018) includes regulations regarding the use of reusable or recyclable containers. The Loi Egalim extends the obligation of Loi Garot (2016) to the public catering and food industry sectors.
- The French government has also issued several decrees pertaining to the application of the laws. For instance, the decree ([décret n°2016-288 du 10 mars 2016](#)) on 5 flows, indicates that since the 1st of July 2016 businesses and organisations that have their waste collected by either private or public service and that produce more than 1100 litres of waste weekly should sort waste in glass, plastic, cardboard/paper, and wood.
- The French Climate Change Plans are the [LTECV law](#) (Law for Energy Transition and Green Growth, and the [Territorial Climate, Air and Energy Plan \(PCAET\)](#). The LTECV law of August 2015 provides that EPCIs (communauté de communes or group of municipalities) with more than 20,000 inhabitants must adopt a Territorial Climate, Air and Energy Plan (PCAET). The PCAET is a planning tool that aims to mitigate and adapt the territory to the effects of climate change.

### Belgium

- The [Circular Flanders Overview Retrospective Report](#) of 2017 – 2019 indicates three pillars of action: circular procurement, circular business, and the circular city. The report also refers to the construction field and the development of a circular construction platform, which would help sharing knowledge on circular materials and raise awareness of eco-design.

*Table continues on next page*

## Policy/Regulations

- In 2015 the [Roadmap Food Loss](#) 2015 -2020 was developed to combat food loss across the food value chain. In support of these ambitions, the Public Waste Agency of Flanders (OVAM) publicised the [Action plan circular food and biomass \(residual\) flow 2021-2025](#). The plan outlines targets for a) more prevention, less loss, b) better sorting and collection, and c) higher value valorisation.

### The Netherlands

- **The Dutch government** has set the target of achieving a fully circular economy by 2050. The goal is for the Dutch economy to be completely circular by 2050, and by 2030 the consumption of primary raw materials should have been reduced by half. There are five transition agendas: 1) [biomass and food](#), 2) [plastics](#), 3) [manufacturing industry](#), 4) [construction](#), and 5) [consumer goods](#).
- The Netherlands announced the [Samen tegen voedselverspilling](#) ('united against food waste') in March 2018. The initiative is managed by the Task Force for Circular Agenda, which involved companies, research institutes, civil society organisations and government bodies. The country aims to be the first in Europe to achieve the UN Sustainable Development Goal 12.3 (halving food waste by 2030).
- The Dutch government has adopted the principles of extended producers' responsibility for the manufacturers or importers of packaging. [The packaging regulations for businesses](#) focus on requiring them to pay for and organise the collection and recycling of packaging, application of prevention measures, minimise the amount of hazardous and dangerous substances in the packaging, maximise the amount of recycled materials used in packaging, give the packed products the longest possible shelf life and minimise the amount of litter produced.
- Food packaging is addressed in the Packaging and Materials (Commodities Act) Decree ([Warenwetbesluit verpakking en gebruiksartikelen](#)). Stricter regulation came in force in July 2021 regarding a deposit on small plastic bottles and a ban on the sale of single-use plastics.
- The Netherlands is also focusing on circular building as a result of the [Environment and Planning Act](#) (2017) indicating the need for smart policy innovation in building methods and materials, but also in policies and practices that govern this sector.

### United Kingdom

- The UK government has clarified that after leaving the EU specific directives will be transposed into UK Law. This policy statement is in line with other strategies of the UK government such as:
  - a) The [25 Year Environmental Plan](#) (2018) focuses on issues such as using and managing land sustainably, increasing resource efficiency and reducing pollution from waste.
  - b) The [Clean Growth Strategy](#) (2017) focuses on issues such as accelerating clean growth, improving industry and business efficiency, improving energy efficiency of homes, and accelerating the shift to low carbon transport.
  - c) The [Industrial strategy](#) (2017) focuses on boosting productivity by backing businesses to create good jobs and increase the earning power of people throughout the UK with investment in skills, industries and infrastructure.
  - d) The [Litter strategy for England](#) (2017), focusing on reducing littering through education and awareness, improving enforcement and better cleaning and littering infrastructure.
  - e) The [Resources and Waste Strategy](#) (2018) focusing on preserving materials by minimising waste, promoting resource efficiency and moving towards a circular economy

Table 1. Circular Economy policies and strategies of the 2 Seas region

The policies and strategies outlined in Table 1 – which are non-exhaustive – should reflect on the actions and supporting activities undertaken by local authorities at the destination and county levels. In other words, it is important that – for the 2 Seas areas – local authorities, guided by the proposed six steps framework, align their actions to the relevant policies and strategies for the tourism sector. In the case of destinations outside the 2 Seas areas, local authorities should consult relevant regulatory frameworks that inform circular economy actions in the tourism sector.

**Inevitably, the CE is becoming increasingly integrated into destination planning where tourism SMEs can thrive more sustainably, inclusively, and be resilient.**

## Tourism resilience through a circular economy

Circular economy solutions are increasingly applied in tourism (e.g., see 2 [Seas Interreg FACET project](#), [Circular Economy Best Practices in the Tourism Industry](#) by CentOUR, 2021 & Interreg InCircle project) and can expand the tourism sector's ability to become more sustainable, resilient, and enhance its contribution to the achievement of internationally recognised sustainable development levels. In fact, a circular economy can promote sustainable tourism development by optimising the use of natural/organic (e.g., water, energy, food) and technical resources (e.g., plastic, paper), as well as by creating new jobs and synergies between the tourism and other sectors.

This is particularly crucial for coastal destinations where - while tourism can cause a wide range of negative impacts - there are many opportunities ahead through a circular economy, to firstly mitigate these impacts, and secondly, improve the quality of the destinations and community wellbeing.

*Benefits associated with the circular economy can enhance the resilience of tourism destinations:*



**Less reliance on external resources**



**Reducing operation costs**



**Creation of new jobs**



**Stimulate better collaboration**



**Prioritise local supply chains**

### Less reliance on external resources

*A circular economy can allow destinations and individual entrepreneurs to become less reliant on imported resources.*

Less reliance on external resources could reduce the sector's vulnerability to resource scarcity (Korhonen et al., 2018). Such benefits have been shown in other industries which use critical materials, circular strategies can reduce risk and vulnerability to resources (Gaustad et al., 2018). Reducing this vulnerability is key in coastal tourism destinations where a longer supply chain can easily be disrupted and where communities and economic sectors often suffer from resources shortage. One example in the tourism sector is the [Tinos Ecolodge](#) located in a remote area of Greece that is autonomous in energy, generating by solar energy and collecting and storing rainwater, minimising the use of publicly supplied water

### Reducing operation costs

*A circular economy can allow destinations and tourism entrepreneurs to reduce their operational costs which can further contribute to their resiliency building (Sorin and Sivarajah, 2021).*

Reducing operation costs can, help tourism SMEs better absorb economic shocks (e.g., the COVID-19 pandemic). In addition to being a key driver for tourism entrepreneurs as shown in a recent survey conducted during the [FACET project](#) and by a study by Sorin and Sivarajah (2021) of Scandinavian hotel chains, see for instance the case of the [Camping Blue Ocean](#) achieving a reduction 12.5% in energy consumption between 2009 and 2017 by switching to renewable energy.

### Creation of new jobs

*A circular economy can lead to the creation of new jobs as part of a greener economy (Sulich and Soloducho-Pelc, 2021).*

Coastal destinations often have a narrow tourism-based economic specialisation making them highly vulnerable to shocks and negative effects of seasonality on employment. A circular economy in tourism would help diversify this narrow economy by creating new, sustainable, and inclusive jobs. Circular solutions in tourism, as for other industries, would lead to direct and indirect circular jobs (Circle Economy, 2020).

## Stimulate better collaboration

A circular economy can also stimulate better collaboration among stakeholders (Circle Economy, 2022).

In a destination, better collaboration among stakeholders would improve the adaptive capacity of the destination. This is because stakeholders can build collaborative strengths through circular solutions, enhance market positions and economies of scale, as well as be ready to face future challenges collectively.

## Prioritise local supply chains

A circular economy can also enable tourism to prioritise local supply chains (Gallaud and Laperche, 2016).

This would not only minimise environmental impacts associated with longer supply chains, but also generate economic benefits and jobs for the destination community while becoming less vulnerable to supply chain disruption and associated higher costs. See for instance the case of the [Auberge Kallistéin in Corsica](#) which obtained the Ecolabel in 2018 following its commitment to promoting short local food supply chains.

In addition – as the circular economy tends to be enabled by digital tools - a transition from a linear to a circular economy in tourism can also promote digital developments, at the destination level, for sustainability (Antikainen et al., 2018). Digital tools, for instance include food-sharing platforms such as [Too Good To Go](#) that is **increasingly used** by hospitality businesses but also the broader **smarter development** of destinations promoting sustainability and resilience.

Moreover, studies show that tourists are increasingly favouring sustainability attributes in destination (e.g., Aydin and Alvarez, 2020) such as the sustainable management of natural resources and responsible practices considerate of local communities. This indicates that circular economy practices can build a competitive advantage for tourism entrepreneurs, and they can become more financially resilient to industry changes.

## The Circular Ladder for tourism entrepreneurs

During the 2 Seas Interreg FACET project the Circular Ladder for tourism entrepreneurs was developed. The Circular Ladder turns the 9R circular economy framework – developed by Potting et al. (2017) - into guidance for tourism entrepreneurs by proposing ten circular solutions across three circular dimensions, in order of priority: a) using and making smarter products, b) extending the lifespan of parts and products, and c) using materials in a useful way.

The Circular Ladder demonstrates how materials could remain within the production and consumption system without producing unnecessary waste and it shows what circular solutions should be prioritised. Therefore, it provides tourism entrepreneurs - in coastal destinations and beyond - with a practical view of the circular solutions that can be applied and tailored to their contexts.

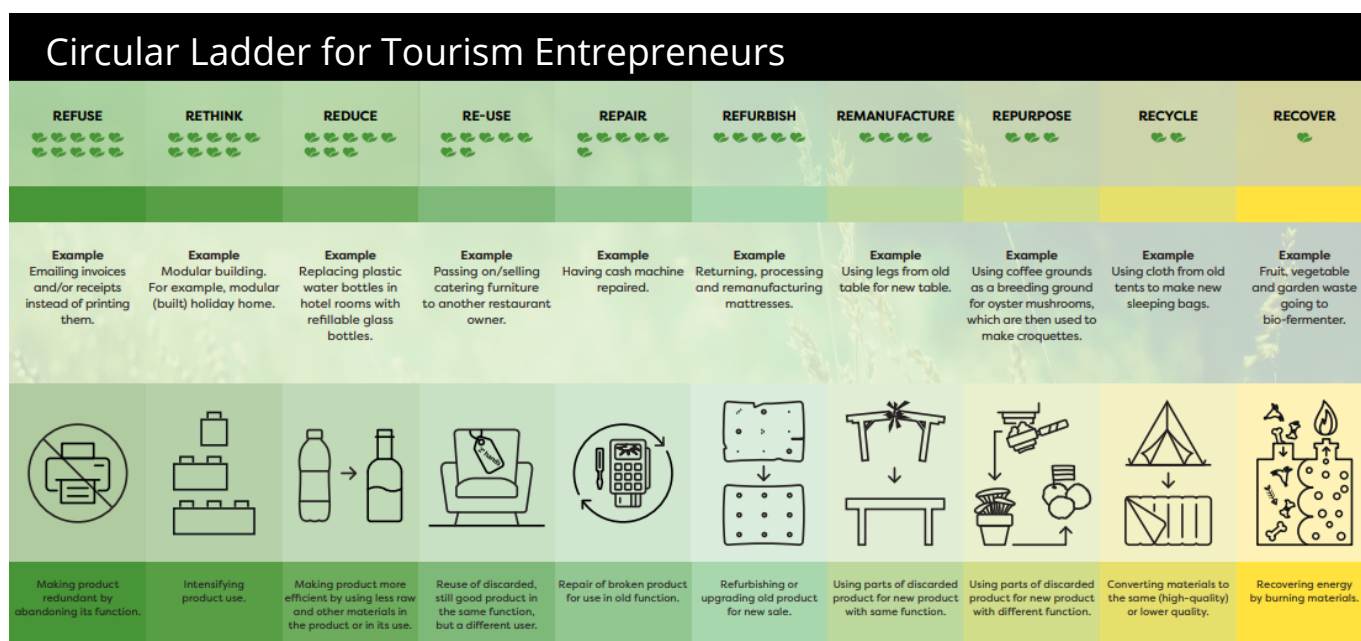


Figure 2. Circular Ladder for Tourism Entrepreneurs

The **first dimension of the Circular Ladder** is the “using and making products smarter” dimension. This dimension should be prioritised where possible as it recommends solutions seeking to refuse the

utilisation of products, particularly avoiding scarce materials entering the system in the first place. The dimension also suggests rethinking product manufacturing.

### Box 2. Using and making products smarter in tourism

## Using and making products smarter in tourism

*Camping en Villapark de Paardekreek, Ons Buiten, Martin's Hotels*



In tourism, examples include modular buildings that re-think about using new cement and steel but using re-used building materials that can be easily disassembled for reuse and repurposing. See the [Camping en Villa Park](#) de Paardekreek which has developed circular building accommodation during the FACET project that can easily be disassembled by using reused concrete blocks in a way such as Lego that can be taken apart and re-used in the future. A similar example is the construction of a circular swimming pool by the [Ons Buiten](#), a campsite in the Netherlands, where a materials database for the building was created making the reuse of these materials much easier in the future. Rethinking ownership of tourism facilities is also essential by prioritizing collective ownership or leasing over ownership. See for instance hotels leasing furniture instead of buying them at [Martin's Hotels](#) where procurement strategy has been re-defined to become more circular

*Picture 1. Circular build dike suites at Camping & Villapark de Paardekreek*

The **second dimension of the Circular Ladder** is the “extending the lifespan of parts and products” dimension. This dimension recommends solutions applied to products and materials after they have entered the economic system. Circular solutions include - in order of priority: re-use, repair, refurbish,

remanufacture, and repurpose, to better optimise products or their parts. Examples include repairing products rather than replacing them, or repurposing parts of products to manufacture a new product of the same or higher value.

### Box 3. Extending the lifespan of parts and products in tourism

## Extending the lifespan of parts and products in tourism

*Hemsby Cups, Ibis Sisteron, Greet, Baie de Somme*

In tourism this can involve establishing a **coffee cups deposit return scheme in tourism destinations** as done during the FACET project in Hemsby in the UK with the [Hemsby Community Cups](#) initiative; **giving furniture a second chance** as done by [Ibis Sisteron](#); and **designing hospitality establishments with upcycled furniture** as done by [Greet](#) in France. Another example is the **valorization of shellfish waste in the tourism sector** in [Baie de Somme](#) as part of the FACET project in France, seeking to find outlets for shell waste by-products in the tourism sector to produce furniture for restaurants and hotels and road markings for bicycle-routes.



*Picture 2. Baie de Somme seeking to find outlets for shell waste by-products in tourism*

The **third dimension** of the Circular Ladder is the “using materials in a useful way” dimension. This dimension recommends solutions applied to products and materials after they have been used and after their lifespan can no longer be extended. Solutions include recycle (upcycle – downcycle) and recover (such as recovering energy from organic waste) or recycling materials into other products, possibly of the same or higher value.

#### Box 4. Using materials in a useful way in tourism



### Using materials in a useful way in tourism

*NH Hotels, A2Ufood project*

A great example in tourism is the [NH Hotels](#), Europe’s third-ranked business hotel chain, up-cycling bottle corks into construction materials, and the [A2UFood project](#) in Heraklion where hospitality businesses and communities are involved with the help of digital tools in actions to properly manage the unavoidable food waste by, for instance, creating a second opportunity for food, and composting.

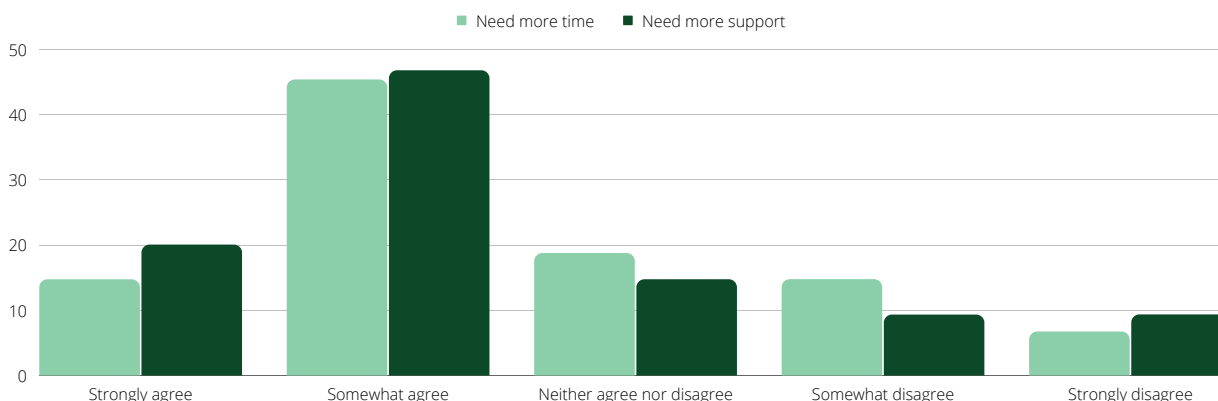
*Picture 3. Upcycling bottle corks in NH Hotel chain*

The adoption of circular solutions illustrated in the Circular Ladder for Tourism Entrepreneurs is not free of challenges but, with the appropriate support, they can be mitigated.

## Challenges to a circular economy in coastal destinations

The Circular Ladder for Tourism Entrepreneurs has shown several circular solutions that can be tailored to the tourism business. Yet, tourism SMEs can face obstacles in adopting circular solutions in their operations, thereby reducing the rate of adoption in the sector. This is also – and especially – the case for coastal destinations where these obstacles can often be more acute due to geographical, seasonality and other destination-specific characteristics. But, with the appropriate support, these obstacles can be mitigated.

**Tourism SMEs can face technical, financial, social, regulatory and market obstacles.** In the 2 Seas region, tourism SMEs – during a FACET project’s survey – have indicated that to engage in circular solutions they need more **technical support for knowledge acquisition and technologies** from universities, government, and trade associations.



*Figure 3 Resource and capabilities barriers to a Circular Economy in tourism*



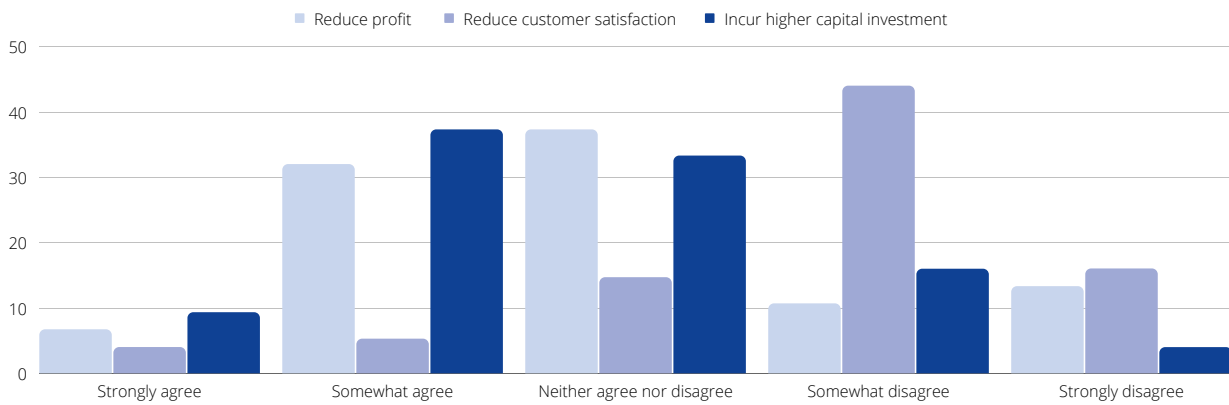


Figure 4. Financial barriers to a Circular Economy in tourism

**For coastal destinations** access to knowledge and technologies for a circular economy can further be challenged by their location, limited presence of innovation hubs, and ability to develop/acquire technologies to their scale and to later manage them cost-effectively (e.g., seasonal fluctuations of waste streams may challenge the operationalisation of waste processing infrastructure such as biogas digestors). SMEs need institutional support to mitigate technical challenges. Technical barriers may also include lack of internal circular skills, little access to green logistics, and establishing green partnerships (Galvão et al., 2018).

**The issues raised above link to the financial barriers commonly faced by tourism SMEs in a circular economy.** In the 2 Seas region, tourism SMEs have indicated that incurring high capital investments is a major barrier for them. Financial barriers can also include **lack of information and opportunities in accessing finances** (Manniche et al., 2018) and a **low level of economies of scale**.

Other barriers may be of socio-cultural, market and institutional nature.

## Main circular economy barriers for tourism SMEs



### Technical

- **Access to circular knowledge.** In coastal destinations such barriers may be more acute given the frequent absence of innovation hubs and research centres.
- **Access to technologies and technologies at the right scale.** In coastal destinations that are highly seasonal, circular technologies should be adapted to their seasonality (e.g., fluctuating waste streams, seasonal business operations).



### Financial

- **High initial capital investments for circular solutions.** This can be a major issue especially in coastal destinations, where there are high numbers of micro-enterprises and SMEs, as their seasonality may be a concern for lenders, thereby calling for tailored financial support.
- **Cost-effective infrastructure management.** In coastal destinations this can be challenged by their seasonality where tourism operations are not year-round.
- **Cost-effective stakeholder partnerships.** In coastal destinations – in contrast to big cities – tourism businesses may face obstacles when seeking to shift to circular suppliers with relatively narrow options nearby and low level of economies of scale. The same applies when seeking to create symbiotic partnerships if the only suitable actors are located distantly (e.g., high logistic costs).



### Regulatory

- **Lack of regulatory/government support.** The FACET survey shows that the tourism SMEs in the 2 Seas coastal areas ask for government support on a different level, including: administrative assistance, technical skills, legal support, and network opportunities. Moreover, a survey of tourism businesses conducted by Martínez-Cabrera and López-del-Pino (2021) highlighted the often lack of supportive regulations and instruments for the tourism sector.



### Market

- **Market challenges for the re-circulation of materials.** This refers to difficulties faced by the entrepreneurs to re-circulate materials through profit-based mechanisms which may be challenged by limited economies of scale and complex and cost-inefficient logistics (Tapia et al., 2021), as well as geographical remoteness. This is even more acute in coastal destinations where the market for materials may be located outside the destination boundaries, impacting economies of scale and overall costs.



### Social

- **Social challenges** can emerge in relation to sectoral resistance to new circular initiatives (Guerra and Leite, 2021) and (perceived) tourist resistance to new circular tourism services and/or products (Bocken et al., 2016).

Table 2. Main Circular Economy barriers for tourism SMEs

These challenges that tend to be faced by tourism SMEs can be mitigated through the appropriate support provided by local authorities. The support that local authorities can provide is very diverse and should be tailored to the needs and opportunities of specific coastal destinations.

# 3 A Six-step strategic framework for local authorities

Local authorities can have a vital role in facilitating a favourable environment for entrepreneurs to adopt circular practices (Bolger and Andréanne, 2019). The same applies to coastal tourism destinations where local authorities are closer to the industry and tend to be better aware of the challenges faced at the local level. The FACET Project has worked side-by-side with local authorities across the 2 Seas region as it recognises the importance of local regulatory and strategic actions to support tourism SMEs in their transition to a circular economy. Local authorities, therefore, can and should help tourism entrepreneurs in mitigating the obstacles described earlier.

Local authorities in coastal destinations can develop or influence the development of regulatory and economic instruments assisting a circular economy in the following ways:

## The role of local authorities in the circular economy

### Support through incentives

Authorities can support tourism SMEs in adopting circular solutions through incentives and tax benefits (Circle Economy, 2019). Such support can help tourism SMEs in coastal areas to overcome some of the barriers they face when seeking to access financial resources. For the 2 Seas region and other coastal destinations, this can help mitigate financial challenges related to seasonality.

### Support and influence regulatory barriers

Authorities can support and influence the removal of prohibitive regulatory barriers which can hamper the circular transition of tourism SMEs as they may find these barriers more challenging to comply with regulations. For instance, by easing – where possible – regulations on the redistribution of by-products or food-contaminated waste such as seashells.

### Develop and facilitate economic mechanisms

Authorities can develop and/or facilitate robust economic mechanisms to help tourism entrepreneurs overcome financial barriers. As learned from the FACET project, these may include sustainability-linked loans, grants and more innovative financing solutions that are particularly accessible for tourism SMEs and tailored to coastal areas (acceptance requirement in line with seasonality).

### Facilitate knowledge sharing, networks and collaborations

Authorities can and should facilitate knowledge sharing, networks and collaborations that are needed in a circular economy (Bolger and Andréanne, 2019). In a coastal destination, this support can help tourism SMEs overcome geographical and seasonal challenges to establish seasonal and more cost-effective collaborations that are often challenged by the characteristics of their tourism economy.

### Ensure availability of local infrastructures

Authorities can and should ensure the availability of suitable local infrastructures that support the functioning of circular economy solutions at the destination (Nogueira et al., 2020). Coastal destinations may be less subject to sufficient circular infrastructure – as in cities – and local authorities should ensure their availability within the destination.

### Remote partnerships with other municipalities/regions

Local authorities should promote partnerships with other municipalities/regions to allow technical and innovative collaboration across administrative borders (Dhawan, 2022). In the 2 Seas region and other coastal destinations this can ensure that flow of innovation can happen easier in cities and more remote or smaller destinations.

Table 3. The role of local authorities in the Circular Economy

Drawing upon the importance of local authorities in supporting tourism SMEs and learning from the 2 Seas Interreg FACET project, the Six-step Strategic Framework is proposed for local authorities and adapted to tourism and coastal destinations (where tourism is an important sector).

**The framework focuses on how to provide the best support to tourism entrepreneurs and SMEs, thereby enhancing local circular economy performance.**

## The Six-steps for a circular economy in coastal destinations

**The Six-step framework builds upon the experience of the [2 Seas Interreg FACET](#) project where the importance of local authorities in enabling the transition to a circular economy of tourism SMEs was recognised. In addition the framework was also inspired by the 6 steps framework to stimulate innovation among tourism SMEs that was developed by the [2 Seas Interreg PROFIT](#) project.**

The FACET framework provides local authorities with step-by-step guidance for a favourable environment for the implementation of circular solutions in the tourism sector. These steps form a circular and mutual reinforcing loop.

**Step 1** recommends the integration of a circular economy vision into local strategic tourism planning.

**Step 2** focuses on creating a conducive regulatory environment.

**Step 3** provides recommendations for the creation of circular transition communities.

**Step 4** provides guidance on how local authorities could offer technical support to tourism entrepreneurs.

**Step 5** indicates and recommends tailored financial support for a circular economy in tourism SMEs.

**Step 6** advocates the role of local authorities in demonstrating and publicising successful circular tourism cases from their destination.

This is a versatile framework, meaning that while the white paper provides recommendations tailored to coastal tourism; the framework is also transferable to other tourism contexts.

**The framework allows local authorities to rethink their operating frameworks and support directly and indirectly the circular economy transition in tourism destinations.**

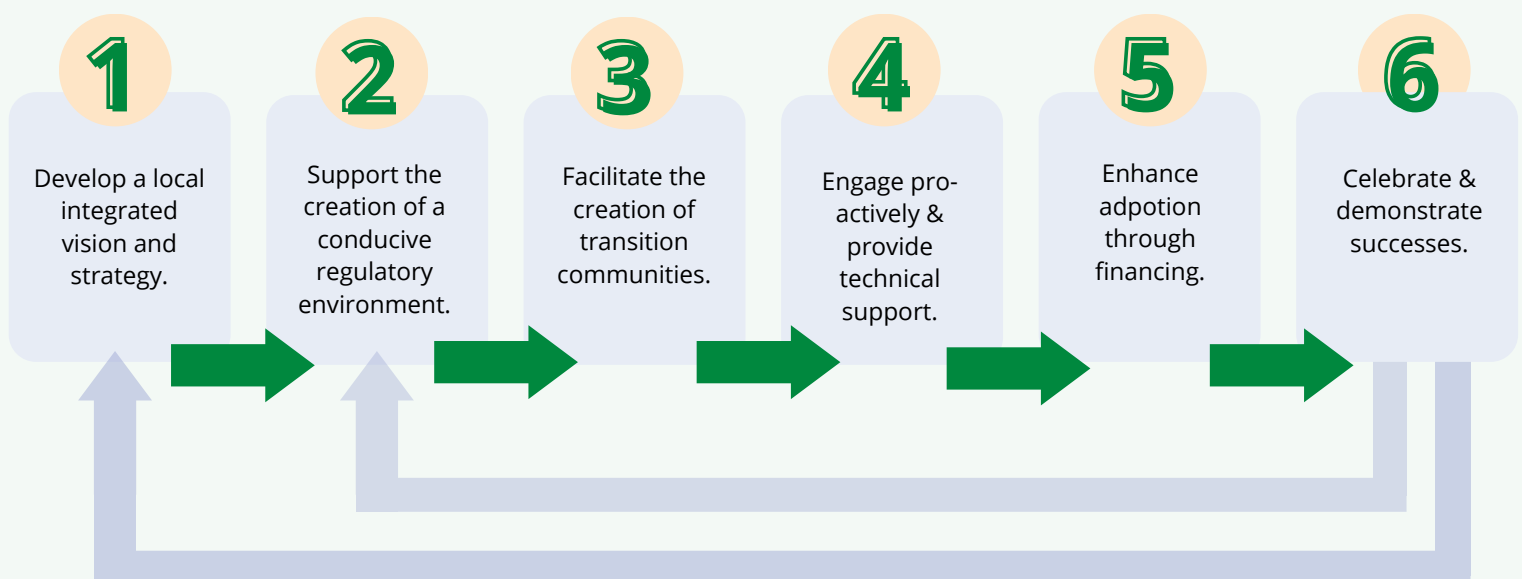


Figure 5. Six steps for local authorities



## Develop a local integrated vision and strategy

**Each destination that seeks to become more sustainable and circular should rethink its vision and layout new novel strategic directions, integrating the opportunities and challenges faced by tourism entrepreneurs when seeking to adopt circular economy solutions.**

In Step 1 of the framework – **develop a local integrated vision and strategy for a circular economy** – local authorities are recommended to support the definition of a common integrated vision and strategic direction with well-defined targets based on identified needs and local circular opportunities. Local authorities can play an essential role in orchestrating this process. Once defined, the strategic vision and direction need to be integrated into destination management and development plans such as the Destination Management Plan and disseminated to relevant stakeholders. These strategic plans should indicate clear development strategies, targets, needed resources and an action plan integrating the circular economy across the tourism landscape.

**The development of a commonly defined vision and strategic direction for a circular economy at the destination requires participative processes involving key local and regional stakeholders.** Such processes may be facilitated by extensive stakeholders' consultation during which the vision for the destination can be re-defined, and key objectives, and timelines to be established. It is essential that needs, challenges, and opportunities for a circular economy are identified from the very beginning through these consultations, thus allowing the development of an integrated strategy that builds on the need to overcome certain challenges as well as capitalising on local opportunities. See for instance the recently published [National Plan for Scotland's Islands](#) which was built upon extensive community and sector consultations addressing common challenges to their sustainable development and the Interreg Mediterranean [INCIRCLE](#) project's participative processes to support solutions and toolkit development.

**Needs and opportunities can be identified through various participative approaches** that the local authorities can facilitate such as stakeholder workshops, meetings, and surveys. Needs mapping for a circular economy should be conducted and be of a technical, technological, financial, and social nature (de Jesus and Mendonça, 2018) and may be related to business internal issues as well as external factors. The context of coastal destinations will influence the nature of these needs and opportunities. **Internal needs** may refer to the technical and financial capacity of the business and **external issues** can be related to logistical systems and supporting infrastructure at the destination level that are essential for circular solutions such as waste reprocessing facilities within or close to the destination.

Islands and coastal areas are at the forefront of such strategic developments integrating circular solutions in their economic landscapes, including tourism. Examples are the [Smart Island Project](#) of the island of Scilly integrating smart solutions for waste, water, and energy in their service sector; [Cyprus' effort](#) to strategically integrate a circular economy across the island; and the [Balearic islands](#) with their regional energy transition plan.

**Also, during the FACET project, key examples show the importance of integrating a circular economy into destination strategic planning as in the case of Westtoer in Belgium.**

## Box 5. A circular economy for Belgium's coastal destinations

### A circular economy for Belgium's coastal destinations

*Westtoer, Belgium*

**Westtoer – Belgian FACET project partner - is working on a new strategic policy plan for tourism on the Belgian coast. With sustainability at the core of Westtoer activities, sustainable strategic planning became an obvious choice for Westtoer and will be used as a steppingstone for its policy.**

Sustainable tourism - through a circular economy - is one of the 7 development perspectives for the new strategic policy plan for tourism and will be integrated into the strategic planning. The strength of having a sustainable vision, for a tourist destination, is that you can weigh much more on future visions in other innovations or developments that are planned in your region. Westtoer works with a sustainability framework that, for each innovation, an assessment is to be done on its contribution to sustainable tourism and circularity. With the creation of a new strategic policy plan that considers this sustainability framework, Westtoer has made the shift from short-term to structural long-term thinking with a sustainable character.

The development of the strategic tourism plan employs a fully participatory approach across three phases and involving the public and private stakeholders as well as the local communities. The first phase involved the analysis stage to inform the Plan through stakeholders' interviews and workshops leading to a detailed study of the region. In the second phase, the DNA of the coastal region is further elaborated through a coastal scan to identify the needs, challenges, and opportunities. In the third phase, the outcome of the analysis is converted into strategic actions which will be marketed and communicated to the wider stakeholders.

Westtoer wants to spread this sustainable vision on tourism in all advice it gives to external partners and external projects that aim for further regional development. This means that, for example, when Westtoer thinks of mobility or coastal defence, it can help build sustainable tourism based upon Westtoer's vision.



Picture 4 & 5. The Belgium coast going circular



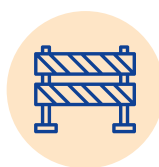
## Step 2

### Support the creation of a conducive regulatory environment

The vision and strategic direction established in Step 1 will help to identify and guide the creation of a regulatory conducive environment for a circular economy (Step 2). Even though local authorities might have a limited remit in developing related policies, financial incentives, and tax instruments, they could exert strong influences in this respect.

This is particularly the case where national authorities prioritise participative approaches, giving voice to local authorities and communities to inform the development of regulatory instruments.

The local authorities should drive the creation of a supportive regulatory environment by:



**Facilitating the removal and/or development of policies and reducing taxation barriers to the application of circular solutions in the tourism sector.** The deployment of circular solutions is often challenged by existing regulations and guidelines (van Keulen and Kirchherr, 2021) such as taxation, and policies limiting the re-circulation of resources such as food by-products.

These actions should be tailored to the specific of the coastal region where the sector may need specific actions (e.g., removing policies that may hamper re-circulation of materials locally between small-medium enterprise actors). Understanding where effective policies and where taxation can be eased is essential. **For instance, the Government of Spain's Balearic Islands has introduced [Law 8/2019](#)** to reduce the amount of waste generated at the source which is regarded as the highest priority according to the waste hierarchy. The law introduces several restrictions that apply to tourism commercial establishments and are aimed at preventing waste.



**Supporting the enhancement of incentives facilitating the application of circular solutions in the destination tourism sector.** This is especially important for SMEs and coastal destinations where, for instance, tourism SMEs may need specific incentives and needs that are rooted in their geographical and economic situations (e.g., to establish on-site small-scale technologies, to facilitate cost-effective logistics).

Incentives can stimulate circular solutions, cost-saving, and investments by tourism entrepreneurs. For example, the [city of Bruges](#) where - with a focus on promoting sustainable mobility - is assisting the phasing out of current conventional tourist boats (diesel model) replacing them with electric boats in line with a circular system. Yet, one of the barriers for the boat companies is the higher purchasing and maintenance cost of electric boats. To mitigate this financial barrier, the city's local tourist authority provides financial support to companies by installing charging points.



**Conducting campaigns to increase the awareness of regulations and guidelines for a circular economy.** Not all tourism entrepreneurs are aware of policy and regulations as well as incentives that are available. The local authority should ensure active communication on these aspects so that they are well understood to generate an overarching impact. Awareness can be enhanced through consultations, workshops, and other communicative tools, and particularly through social media.



**Facilitate the adoption of national regulations at the destination level.** The implementation of national regulations for sustainable development and circular economy at the destination level needs the active support of local authorities and the synergies they can/should create at the local/regional level for the realisation of circular actions. For instance, the French **Law for Energy Transition and Green Growth** requires any group of municipalities with more than 20,000 inhabitants to develop a climate change plan. The role of local authorities is essential in bringing together local actors in the territory to encourage the adoption of ambitious actions.

#### Box 6. Sustainable waste management on the beach in De Haan

### Sustainable waste management on the beach in De Haan

*Municipality of De Haan, Belgium*

**The municipality of De Haan on the Belgian Coast joined the European FACET project and improved its waste management on the beach with the support of Westtoer. They have created a favourable and conducive environment for a circular economy.**

In 2021 the local municipality of De Haan invested in a pressure pipeline on the beach to help beach bars and beach operators dispose of their wastewater and advised them on how to manage their beach waste efficiently. Yet the SMEs faced challenges in using the pipeline as they had to pay for pumps and wells themselves when connecting to the pipeline.

With the help of the FACET project, De Haan set up a successful cooperation and facilitated active conversations among all the important players on the beaches to work together more intensively towards waste-free beaches. This has led to different ambitious agreements with the beach managers, waste workers and collectors of the municipality itself with respect to the concerns addressed by the tourism SMEs.

Cooperation among the players has also led to the launching of a sustainability campaign “Leave only your footprint here” and an Eco Beach Award for the most sustainable players in the tourism sector which further motivates tourism SMEs to be more sustainable and increase the utilisation of the pipeline.



Picture 6. Municipality of De Haan working on sustainable waste management





## Step 3

### Facilitate the creation of transition communities

**In continuation of Steps 1 and 2 that led to the identification of opportunities and needs, in Step 3 transition communities can be co-developed and launched, with their objectives and agreements established. These transition communities will address the needs and capitalise on the opportunities.**

Transition communities are multi-stakeholders and multi-sectoral, created with a specific objective in mind. They can facilitate collaboration and innovation for a circular economy in the tourism sector by strategically bringing together different actors to stimulate collaboration and innovation. Different types of transition communities have been found to facilitate the development and adoption of a circular economy in the 2 Seas region. These are value chain communities, joint purchasing communities, and quadruple helix communities.

#### **Value Chain communities**

The creation of a value chain community supports tourism entrepreneurs in coastal destinations to create synergies along the value chain and alignment of their business model in order to move from a traditional to a circular value chain where environmental, social, and financial impact are the central elements.

The collaborations among value chain stakeholders enable them to mitigate financial and technical barriers that lay beyond the scope of an individual business. A value chain is therefore about working with suppliers and customers to find solutions. During the 2 Seas FACET project a **Value Chain model** was developed, which not only shows the different actors that take part in a value chain community, but also provides an attractive and fun working method for entrepreneurs to crystallize their ideas on paper and work together with their suppliers and customers.

#### **A Joint-purchase community**

One of the key barriers faced by tourism SMEs in coastal areas when seeking to adopt circular solutions are the limited economies of scale (e.g., due to their size, location, and seasonality), which makes many circular economy solutions cost-ineffective. By creating synergies on joint purchasing, barriers related to economies of scale can be mitigated and market power could be enhanced. Joint purchasing agreements are arrangements between (groups of) businesses to purchase services, equipment and/or supplies jointly. Such an agreement aims to create buyer power, which will lead to lower prices or better quality of products or services, as well as enable them to demand circularity in the supplies. During the 2 Seas FACET project a **Joint-Purchase tool** for the circular economy has been developed – based on practical experience – and made available to stakeholders seeking to learn and engage in joint purchasing activities for a circular economy.

The 2 Seas FACET project has strongly recognised the importance of joint purchase communities for small coastal destinations. This is for example illustrated by the Hemsby Community Cups initiative, one of the pilots facilitated by the 2 Seas Interreg FACET project.

Box 7. Hemsby Community Cups: a joint purchase community for a circular economy

## Hemsby Community Cups: a joint purchase community for a circular economy

Great Yarmouth borough council, Norfolk County Council, England

**The Hemsby Community Cups facilitated by the 2 Seas Interreg FACET project in the English coastal destination of Hemsby is a great example of how a joint-purchase community can facilitate the adoption of circular solutions in a tourism destination.**

The Hemsby Community Cup is a reusable cup designed to put a stop to single-use disposable cups and get closer to becoming zero waste by adopting a circular deposit return system. Through the Hemsby Community Cups, participating tourism entrepreneurs can make a concerted effort to improve the sustainability of their business operations.

The joint-purchase community - which was created through stakeholders' consultations facilitated by a local champion the Norfolk County Council and Great Yarmouth Borough Council - allows tourism entrepreneurs to collectively purchase the re-usable cups and manage the initiative. They can overcome low economies of scale that may hamper the implementation of circular solutions, and benefit from the joint-purchase community to learn from each other, building a sense of community, and continuing to innovate for a more sustainable coastal destination.



Picture 7. A Hemsby Community Cup

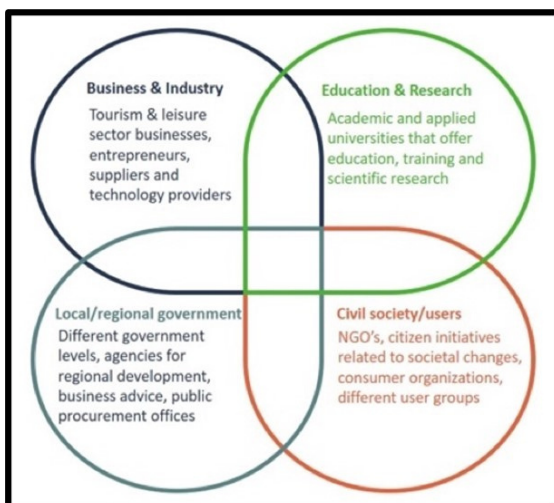


Figure 6. The Quadruple Helix model

### A Quadruple Helix community

The Quadruple Helix community brings together representatives from government, civil society, academia, and industry to collaborate towards a circular economy. This is related to the core of the FACET project. In fact, during the FACET project, the creation of a **Quadruple Helix Community** for a circular economy was deemed essential to connect coastal destinations to different stakeholders. Often, SMEs in coastal destinations face more accessibility challenges to innovation than larger urban areas and innovation-driven communities are crucial in enabling the transition to a circular economy.

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A Quadruple Helix community includes:

- **Public authorities** including local and regional government policymakers
- **Business and industry** including local businesses, industry representatives and regional development agencies.
- **Academia** including universities and other research institutions.
- **Civil society** including NGOs, citizens initiatives and consumer organisations.

In addition, transient organisations such as FACET, which would cease to exist after 3 years, are also playing important roles in the journey towards a circular economy.

The reasons for a circular economy Quadruple Helix community is twofold:

- It is easier to drive innovation for a circular economy when working together.
- It allows the optimisation of informal and formal regional networks which helps strengthen local economic activities.

The Quadruple Helix entails several meetings that focus on how to foster an innovative environment for organizations and helps them to develop better products and services. As such, partners in the Quadruple Helix strive to have a positive effect on the business climate and society in general.

Therefore, it is an active joint effort where the different actors/sectors bring different perspectives and expertise on the circular economy, from research to policy expertise and where the active participation of businesses and civil society organisations allows more transparency on the opportunities and challenges to the circular economy.

The Quadruple Helix approach proved effective in supporting the entrepreneur's adoption of circular economy solutions during the 2 Seas FACET project. For example, the development of the [De Paardekreek](#) circular accommodation was the result of active and phased stakeholders' interaction (e.g., local authorities, research centres, and business support agencies) from planning to construction where each stakeholder brought own expertise and support to allow the innovative and circular accommodation project.



## Engage pro-actively and provide technical support

After identifying the needs in STEP 1, acted on regulations in STEP 2, and created transition communities in STEP 3, in STEP 4 local authorities should address the technical needs of entrepreneurs. Technical support should be tailored to the differing typologies of businesses, and to the circular solutions that they are trying to adopt. To enhance innovation, technical support and capacity building at the destination level, local authorities can:

### **Offer personalised advice and coaching to destination tourism SMEs:**

Personalised advice and coaching can either be directly provided by local authorities or supported by third party organisations, and/or by digital tools. Local authorities should seek collaboration with universities and other innovative centres to create active coaching activities such as living labs. Coaching would be tailored to the need and opportunities expressed by the SMEs and to the specific circular solutions that are intended to be integrated into business operations. Support can include innovative idea generation via open innovation, conducting circular economy feasibility studies within their operations (e.g., what solutions can be implemented? What is needed? Action plans?), as well as allowing tourism SMEs to conduct self-assessment in easy ways.

See for instance [the Castwater online tool](#) of the Greek coastal Municipality of Rethymno that allows SMEs to identify ways to assess and improve their water management issues, breaking technical and financial barriers, and [the Water Barometer Tool](#) developed by the Smart WaterUse project that helps mapping out how water sustainable the company is, water risks and how is the company equipped against these risks. The Water Barometer provides several scenarios for alternative water use.

### **Generate knowledge flow among destination tourism SMEs:**

Local authorities can facilitate the generation of circular economy knowledge among tourism SMEs. This can be done through seminars and campaigns, for example, by establishing these as regular activities of the transition communities created in STEP 3 as well as by developing and/or using other communication channels to reach tourism SMEs outside these communities but operating within the destination.

### **Provide more information on available technologies and digital tools:**

Local authorities should also support awareness building on available digital tools and technologies for a circular economy and showcase successes in adopting them. Technologies may need to be adapted to the scale of several SMEs and/or at destination level (via joint purchase) to be financially and technically effective. Awareness and capacity building on technologies and digital tools can be conducted through the transition communities, seminars, and workshops.

**The 2 Seas FACET project has strongly recognised the importance of personalised auditing for tourism SMEs as shown by the case of the B&B De Arend & Tearoom Cornet de la Mer.**

## Box 8. B&B De Arend & Tearoom Cornet de la Mer



### B&B De Arend Nieuwpoort: sustainable luxury

*B&B de Arend, Belgium*

**B&B De Arend recently installed 26 solar panels with 3 batteries (15kW) and a combined heat and power plant, the fuel cell that generates electricity and heat simultaneously.**

Through these sustainable investments with a payback period of 8.5 years, the B&B sees its monthly energy bill decrease by € 650. They also benefit from a reduced consumption of 22,500 kWh thanks to the complete switch to green electricity. These ecological interventions were realised thanks to the support through the European project FACET, supported by Westtoer. An experienced sustainability consultant was appointed to coach the entrepreneurs. The external consultant gives personalised advice and coaching based on the needs and opportunities expressed by the SME.

De Arend premises is a typical Flemish building and former clothing store in the centre of Nieuwpoort, rebuilt after WWI. Today it houses a B&B and tearoom. Until recently, there was no central heating, and all 6 rooms used electric heaters. There was an urgent need for a drastic change, not only for financial reasons, but also from a sustainable point of view.

During the mandatory Covid-19 closure, De Arend decided to make their business, including tearoom Cornet de la Mer, more sustainable. The basic idea is to offer more service and experience, resulting in less or no CO<sup>2</sup> emissions. Now a hydrogen power plant provides electricity, hot water and air conditioning in the rooms. For Westtoer it is important that the expert looks for circular solutions, which are both technically and financially feasible. And even more important: the coaching doesn't end with tailored advice and possible solutions, but with help when it comes to finding a supplier, installation and implementation. Working together with an expert that can support the SMEs with technical, financial and moral support from the start until implementation is of inestimable value in this process.

Westtoer emphasizes the importance of supporting and encouraging tourism entrepreneurs to apply circular solutions within their businesses, so that new sustainable business models could emerge. This example shows that also small tourism businesses can commit to sustainability and highlights the opportunities within circular entrepreneurship in the tourism sector.



Picture 8 & 9. B&B de Arend working on sustainability

# Step 5

## Enhance circular economy adoption through financing

**Along with the technical support provided in STEP 4, in STEP 5, local authorities should facilitate the adoption of circular solutions among tourism SMEs through developing and/or facilitating financing mechanisms that are tailored to the context, the sector and the requirements of a circular economy in the tourism sector.**

For SMEs, financing circular solutions can be especially challenging as they often have limited investment capital, and/or awareness of funding options and opportunities. To overcome this barrier to increasing circular economy adoption among tourism SMEs, local authorities can directly design funding support or support it through synergies with the wider finance sector. Synergies with the finance sector are essential as the sector plays a key role and should act as an enabler of circular practices by intentionally allocating funds to support circular investments.

Public and commercial funding opportunities should be offered specifically and targeting circular economy investments in the tourism and leisure sector from financing initial stages such as for audits, and feasibility studies to the actual implementation of the solutions. They should be widely publicised, so that entrepreneurs are aware of funding opportunities. The application process could be challenging for SMEs and external help and support should be provided.

Financing mechanisms such as **grants, voucher schemes, crowdfunding, and loans** can all be adapted to the purpose of financing circular solutions in the tourism sector of coastal destinations. Their application in tourism destinations is rapidly increasing. For instance, the **CONSUME LESS MED initiative** during which The Energy and Water Agency in Malta launched a financial scheme for tourism SMEs, giving them access to a maximum of €5,000 to carry out an energy audit. Through the energy audit, the enterprise can identify actions or an investment that may be carried out to reduce energy consumption in their operations. Malvern Hills has promoted – as part of its **Greening Your Tourism Business Initiative** – a grant for tourism SMEs wishing to receive energy auditing and solutions.

However, while these cases provide the needed kickstarter for SMEs, more holistic financing approaches for circular solutions can also be developed as often entrepreneurs received support for specific and tailored advice, but do not have the financial means to make the following capital investment. Thus, more financial means for the implementation phase of circular solutions in tourism are still required. **An inspiring example is the Province of West Flanders and Westtoer in 2020 has launched subsidies for innovative, experiential, and sustainable concepts in the accommodation sector providing – for project with minimum of €10,000 - a subsidy of 50% of the total project cost (with max €25,000).**

For financing a circular economy in tourism destinations, financing mechanisms (e.g., their application and acceptance criteria) need to align to the limitations as well as to the opportunities faced by coastal tourism SMEs (e.g., challenges related to seasonality, and/or to their size). Learning from the 2 Seas FACET project, recommendations can be made to local authorities on how to align common financing mechanisms to the circular economy and the needs of tourism SMEs in coastal destinations:

Grants and vouchers for a circular economy in tourism:

- **Promote awareness of the circular economy** in the financial sector and the specific requirements faced by coastal tourism SMEs.
- **Promote the alignment of grants** and small voucher schemes to the identified circular economy opportunities at the destination, where grants and vouchers are designed to promote **local** potential local circular solutions.
- **Support the increase of tax credits** and/or allowances to accelerate the adoption of circular solutions in the tourism destination.
- **Create a one-stop centre** (a single point of support for tourism SMEs) by collaborating with private organisations, businesses, and academics to provide tailored support to tourism SMEs from creating business plans to finding and applying for funding schemes.

**During the 2 Seas FACET project, a voucher scheme proved to be successful in supporting tourism SMEs in initial funding for concrete technical solutions for their circular ideas.**

## Box 9. The 2 Seas FACET project voucher scheme



### The 2 Seas FACET project Voucher Scheme

*Impuls Zeeland and Beach Paviljon Haven van Renesse, The Netherlands*

**To boost the adoption of circular entrepreneurship Dutch SMEs in the tourism and leisure sector can apply for a voucher as part of the FACET project voucher scheme. With this voucher external support and expertise are sought to answer the specific needs of the selected entrepreneur. Benefitting from a maximum of €10,000 of support in the form of time and expertise, entrepreneurs are guided to develop a business plan offering customised circular solution(s).**

Beach paviljon Haven van Renesse is one of the entrepreneurs who joined the scheme. Every season, tourists drink hundreds of thousands of cups of coffee and glasses of freshly squeezed orange juice on the coast of Zeeland. The coffee ground and orange peels end up in an incinerator, instead of making them into new products. Together with 5 other beach pavilions and guided by an expert on circularity, they opted for the latter and now process their waste in a circular manner: the coffee ground is used for growing mushrooms used in the production of Dutch Croquettes (deep fried breaded snack with beef ragu filling). The company that makes the croquettes is [GRO Together](#). The orange peels are processed by companies such as [Peel Pioneers](#) to produce drinking alcohol, as result of finding new purpose for waste which was previously burned waste was significantly reduced.

*Picture 10. Beach paviljon Haven van Renesse is reducing their waste by processing it in a more circular manner*

Loans for a circular economy in tourism SMEs:

- **Create (or ask relevant government authorities) to offer public loans**, with low interest (and in line with the seasonality of coastal destinations), either from state-owned banks or green investment banks.
- **Encourage the creation of more innovative financial products** such as hybrid (grant and loan) products for capital investment in the circular economy.
- **Create or ask for the creation of low-collateral and low-cost loans** via a public and private partnership under a risk-sharing strategy. This would attract more demand for these government-backed loans and ultimately more investments in circular solutions among tourism SMEs.
- **Support the creation of a government-guaranteed circular economy business** loan schemes that help soften certain criteria for assessing applications from tourism SMEs.
- **Facilitate the adoption of firm-based evaluation** rather than sector-based indices in loan assessments of circular economy investments from tourism SMEs.
- **Facilitate the expansion of lender groups** to include local and cross-border investors by creating synergies with the financial sector in other regions and countries. .

Crowdfunding for a circular economy in tourism SMEs:

- **Support the creation of circular economy specific crowdfunding platforms** for the tourism sector. These platforms can be local or part of a larger hosting platform with the same purpose and focus.
- **Promote the utilisation of these crowdfunding platforms** by the destination tourism SMEs, raise awareness of their benefits, share local successful cases, and build local capacity in designing and launching crowdfunding initiatives within the destination.
- **Focus on a reward-based crowdfunding model** to encourage the participation of local communities and tourists in the efforts of circular economy activities in the destination. It is also a great marketing tool for tourism SMEs and the destination.

In the 2 Seas region, examples of sustainability funds for a circular economy in the tourism sector of coastal destinations are the Fonds Verblifrecreatie Zeeland and the French Fund for Sustainable Tourism. Explore them below:

#### Box 10. The Fonds Verblifrecreatie Zeeland

### The Fonds Verblifrecreatie Zeeland

Impuls Zeeland, HISWA-RECRON, Provincie Zeeland

The '**Fonds Verblifrecreatie Zeeland**' (the Netherlands) supports companies that want to invest in quality improvement and sustainability to help make their company future-proof.

The fund focuses on financial support for campsite entrepreneurs with plans aiming at circular construction, energy transition, and nature and landscape development, which fit within the framework of the Zeeland Coastal Vision. In this way, a quality and diverse tourism sector could be created in Zeeland, strengthening its local economy. The 'Fonds Verblifrecreatie Zeeland' is managed by Impuls Zeeland and count on the support from branches of larger organizations such as HISWA-RECRON and other banks (ABN AMRO and Rabobank). The Fund amounts to € 6 million, partially contributed by the Region Deal of the Province of Zeeland and the Ministry of Economic Affairs and Climate.



Picture 11. Entrepreneur Adriaan Wisse shows the developments he made by using Fonds finance

#### Box 11. The French Fund for Sustainable Tourism

### The French Fund for Sustainable Tourism

ADEME, Agir

On the 3rd of September 2020, the French government set up an exceptional economic recovery plan of 100 billion euros. 30 billion euros of the fund are devoted to reducing France's carbon emissions by 40% by 2030 (compared to the 1990 level) and to supporting the development of green technologies. As part of this national recovery plan, ADEME has launched the Sustainable Tourism **Fund to finance projects** from restaurants and tourist accommodation providers that wish to lower their environmental impact.

This scheme aims to finance one or more investments and/or studies carried out by the company. 70 businesses received this grant. The scope includes sustainable business plans for restaurants or accommodation providers (with a maximum of 2000 euros per grant), greenhouse gas emissions reduction strategy (max. 4 000 euros), and diagnosis to reduce packaging or replace plastic packaging (max. 5 000 euros). The fund has financed a wide variety of investments such as highly energy-efficient clothes dryers and washing machines, revegetation to refresh buildings, water-saving devices for bathrooms or sanitary facilities, bin composters or composting pavilions for bio-waste or cargo bikes for professional use. The Fund can also support training in eco-gestures or the European Ecolabel certification (max 2000 euros per product or service).



Picture 12. Reducing carbon emissions in France





## Step 6

### Celebrate and demonstrate successes

**Best practices inspire other businesses to adopt similar solutions in their operations, especially when these practices demonstrate documented benefits for entrepreneurs. The experience gained from the implementations of circular solutions would also feedback to enhance policy vision in Step 1 and improve the regulatory environment and infrastructure in Step 2, to accelerate further adoption.**

It is, therefore, imperative for the local authorities to support the demonstration of success stories among tourism SMEs adopting circular economy practices and to celebrate the benefits that the applied circular solutions have generated for the businesses concerned. Businesses inspire businesses and several actions can be taken by local authorities to enhance the visibility of a destination's circular economy successes.

#### **Assist successful circular tourism SMEs to promote their initiatives:**

**Local authorities** – with the support of other destination stakeholders – need to valorise and support circular tourism SMEs by enabling market promotion. This can be done by the creation of a destination database (to integrate with the destination's website) with list of the circular businesses, their achievements, and their contribution to the overall sustainability of the destination. This can allow the replication of approaches but also generate marketing advantages leading to an increase in financial benefits for circular SMEs. For instance, a specific [webpage developed by Westtoer](#) dedicated to the promotion of SMEs and organizations that contribute to the overall sustainability of the region.

#### **Develop a local recognition system to publicise achievements:**

**Local authorities** – with the support of other destination's stakeholders – can develop a local recognition system (or support entrepreneurs' access to international recognition opportunities). This can be done in various ways. For instance, by developing a sustainable tourism award such as in the case of the municipality of De Haan that presented in 2021 the first [Eco Beach Award](#) recognising the most sustainable beach cart owner, beach bar and surf club. The award is a part of the theme of waste-free beaches and the sustainability campaign from De Haan "Leave only your footprint here". The trophy is a design by Noordzee Trash Art and is made with waste from the North Sea beach." Another example is the [Teruel Siente Responsible Tourism Award](#) recognising the best sustainable tourism initiative and its innovative impact in the region. Local recognition can also be promoted through labels or sustainability badges, such as the ["ConsumelessMed Label"](#) assigned to private and/or public entities achieving sustainable management actions towards the reduction of energy, water and waste generation in the countries around the Mediterranean Sea.

#### **Introduce sustainability or circularity into the categories of a local customer rating system and/or encourage similar approach in global rating platforms:**

**Local authorities** – with the support of other destination's stakeholders – can encourage customers/tourists to rate the level of sustainability or circularity of businesses, in addition to other categories such as location, staff, facilities, value for money, customer service, and cleanliness. The customer rating/review system will provide an insight into customer perception of sustainability or circularity of a tourism businesses and will have implications on the overall number of "star" of the business. Circularity should be well-recognised!

Global platforms, such as booking.com or Airbnb, should also include a category of sustainability or circularity in their customer review system, reflecting on customers' sustainability value.

An example from the 2 Seas Interreg FACET project is the Camping en Villapark De Paardekreek in the Netherlands on how the successes of the circular accommodation have been promoted locally and nationally.

Box 12. Celebrate success at Camping en Villapark De Paardekreek

## Celebrate success at Camping en Villapark De Paardekreek

Villapark de Paardekreek, The Netherlands

**Camping en Villa De Paardekreek** is an innovative circular accommodation opened in 2021 with the support from the 2 Seas Interreg FACET project. The circular accommodations are embedded in the local dike and are planned, designed, and constructed in a circular way with local and international partners. The De Paardekreek has been a source of inspiration for its innovative approach.



**The local authorities supported the development** of De Paardekreek throughout the development phases as well as ensuring that the circular accommodation is seen as an example for the destination. For instance, during the **opening ceremony** in 2021, the mayor, the city council, and the **local media were present** to support and document the achievement.

**The success story of the Camping en Villa De Paardekreek** has also been **demonstrated on an international level** with articles published in practitioners' magazines such as "Circular Online" giving De Paardekreek an opportunity to be known and be an inspiration behind its destination boundaries. Furthermore, De Paardekreek could share its circular insights at events and workshops to entrepreneurs, SMEs, and consultants and interested partners and hoteliers could visit the campsite for knowledge exchange. In doing so and with the support of local authorities, media and other local stakeholders, De Paardekreek could build an international network and inspire other hospitality businesses to become more sustainable and circular.

Picture 13 & 14. Opening of the circular accommodations at Camping & Villapark de Paardekreek

# 4

## Concluding summary

The white paper proposes six strategic steps for local authorities to enable the tourism sector transition to a circular economy in coastal destinations. The steps draw from the experience of the EU 2 Seas FACET project as well as relevant examples from other destinations.

### The six steps

- 1** Develop a local integrated vision and strategy for a circular economy
- 2** Support the creation of a regulatory conducive environment for a circular economy
- 3** Facilitate the creation of transition communities for a circular economy
- 4** Engage pro-actively and provide technical support for a circular economy
- 5** Enhance circular economy adoption through financing
- 6** Celebrate and demonstrate success

The six steps help integrate a common circular economy vision and targets at the local level through the participation of stakeholders. Moreover, they guide the facilitation of a conducive regulatory environment, a detailed understanding of the local barriers to a circular economy and the design of a transition framework within which tourism entrepreneurs are supported from the technical, financial, and social perspectives. The six steps also show how the local authorities – through actively liaising with financial institutions – can alleviate the financial barriers faced by tourism businesses when seeking to adopt circular solutions.

Finally, the steps highlight the importance of celebrating successes to allow businesses to inspire other businesses through communication mechanisms that enhance not only the circular solutions that have been implemented but also the short and long-term benefits for the entrepreneurs involved. These successes can feedback to enhance the local environment and infrastructure to further accelerate the adoption and diffusion of innovative circular economy practices, as well as, over the longer term, embolden circular economy visions and targets in other local areas and destinations.

# 5

## References

### A

Antikainen, M., Uusitalo, T. & Kiviytö-Reponen, P., (2018). Digitalisation as an enabler of circular economy. *Procedia CIRP*, 73, 45-49. Available at: [https://www.researchgate.net/publication/326165338\\_Digitalisation\\_as\\_an\\_Enabler\\_of\\_Circular\\_Economy](https://www.researchgate.net/publication/326165338_Digitalisation_as_an_Enabler_of_Circular_Economy)

Auberge Kallisté (2022). Le restaurant. Available at: <https://auberge-kalliste.corsica/restaurant>.

Aydin, B. & Alvarez, M. D., 2020. Understanding the tourists' perspective of sustainability in cultural tourist destinations. *Sustainability*, 12(21), p.8846. Available at: [https://www.researchgate.net/publication/345136825\\_Understanding\\_the\\_Tourists%27\\_Perspective\\_of\\_Sustainability\\_in\\_Cultural\\_Tourist\\_Destination](https://www.researchgate.net/publication/345136825_Understanding_the_Tourists%27_Perspective_of_Sustainability_in_Cultural_Tourist_Destination)

### B

Balkenende, F. (2021). Vakantie vieren in een dijk bij de Paardekreek: de suites zijn nog volledig te recyclen ook. PZC. Available at: <https://www.pzc.nl/bevelanden/vakantie-vieren-in-een-dijk-bij-de-paardekreek-de-suites-zijn-nog-volledig-te-recyclen-ook-a7804e2c?referrer=https%3A%2F%2Fwww.google.com%2F>

Blauwe Cluster (2022). Smart WaterUse. Available at: <https://www.blauwecollege.be/project/smart-wateruse>

Bocken, N. M., De Pauw, I., Bakker, C., & Van Der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of industrial and production engineering*, 33(5), 308-320. Available at: [https://www.researchgate.net/publication/309699661\\_Product\\_design\\_and\\_business\\_model\\_strategies\\_for\\_a\\_circular\\_economy](https://www.researchgate.net/publication/309699661_Product_design_and_business_model_strategies_for_a_circular_economy)

Bolger, K., & Doyon, A. (2019). Circular cities: exploring local government strategies to facilitate a circular economy. *European planning studies*, 27(11), 2184-2205. Available at: <https://www.tandfonline.com/doi/abs/10.1080/09654313.2019.1642854?journalCode=ceps20>

### C

CentTOUR (2021) Circular Economy Best Practices in the Tourism Industry. Available at: <https://circulartourism.eu/resources/handbooks/>

CentTOUR (2021). Greet rethinks its design with upcycled furniture. Available at: <https://circulartourism.eu/greet-rethinks-its-design-with-upcycled-furniture/>

CentTOUR (2021). NH Hotels recycling bottle corks into construction materials. Available at: <https://circulartourism.eu/nh-hotels-recycling-bottle-corks-into-construction-materials/>

Circle Economy (2019). The role of municipal policy in the circular economy: investment, jobs and social capital in circular cities. Available at: [https://circulareconomy.europa.eu/platform/sites/default/files/5d15be02940ad0c394e7a9ff\\_circle\\_economy\\_-\\_the\\_role\\_of\\_municipal\\_policy\\_in\\_the\\_circular\\_economy.pdf](https://circulareconomy.europa.eu/platform/sites/default/files/5d15be02940ad0c394e7a9ff_circle_economy_-_the_role_of_municipal_policy_in_the_circular_economy.pdf)

Circular Flanders (2019). Circular Flanders: Retrospective Report 2017-2019. Circular Flanders: Mechelen. Available at: [https://www.vlaanderen-circulair.be/src/Frontend/Files/userfiles/files/Circular\\_Flanders\\_Retrospective\\_Report.pdf](https://www.vlaanderen-circulair.be/src/Frontend/Files/userfiles/files/Circular_Flanders_Retrospective_Report.pdf)

Compagnie Française d'Hôtellerie (n.d.). Donner, c'est recevoir... Available at: <https://hospitality-on.com/sites/default/files/2017-10/CFH%20-%20Donner%20c'est%20recevoir%20-%20PDF%20Presentation.pdf>

Cyprus Circular (2022). Cyprus Circular Economy Network. Available at: <https://cypruscircular.org.cy>

### D

De Kurst (2022). Mijn duurzame kust. Available at: <https://www.dekust.be/nl/mijn-duurzame-kust>

Dhawan, P. (2022). Circular economy guidebook for cities. Available at: [https://www.cscp.org/wp-content/uploads/2019/03/Circular\\_Cities\\_Publication.pdf](https://www.cscp.org/wp-content/uploads/2019/03/Circular_Cities_Publication.pdf)

Dimitrova, A. (2016). Electric boats transport tourists in Bruges. The Mayor.eu. Available at: <https://www.themayor.eu/en/a/view/electric-boats-transport-tourists-in-bruges-4147>

### E

European Commission (2020). Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions: A new Circular Economy Action Plan for a cleaner and more competitive Europe. European Commission: Brussels. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN>

European Commission (2019). Communication from the Commission: The European Green Deal. European Commission: Brussels. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN>

European Commission (2021). European Capitals of Smart Tourism. Available at: [https://smart-tourism-capital.ec.europa.eu/cities/leading-examples-smart-tourism-practices-europe\\_en](https://smart-tourism-capital.ec.europa.eu/cities/leading-examples-smart-tourism-practices-europe_en)

European Commission (2021). Recovery plan for Europe: Next GenerationEU. European Commission: Brussels. Available at: [https://ec.europa.eu/info/strategy/recovery-plan-europe\\_en](https://ec.europa.eu/info/strategy/recovery-plan-europe_en)

### F

FACET Project Portfolio (2022). Circular solutions for the management and valorization of shellfish waste. Available at: [https://www.projectenportfolio.nl/wiki/index.php/FACET\\_Pilot\\_PR\\_00004](https://www.projectenportfolio.nl/wiki/index.php/FACET_Pilot_PR_00004)

FACET Project Portfolio (2022). Demonstrating viability of circular tourism accommodation. Available at: [https://www.projectenportfolio.nl/wiki/index.php/FACET\\_Pilot\\_PR\\_00002](https://www.projectenportfolio.nl/wiki/index.php/FACET_Pilot_PR_00002)

FACET Project Portfolio (2022). Joint Purchase. Available at: [https://www.projectenportfolio.nl/wiki/index.php/FACET\\_Tool\\_PR\\_00004](https://www.projectenportfolio.nl/wiki/index.php/FACET_Tool_PR_00004)

FACET Project Portfolio (2022). Quadruple Helix. Available at: [https://www.projectenportfolio.nl/wiki/index.php/FACET\\_Tool\\_PR\\_00003](https://www.projectenportfolio.nl/wiki/index.php/FACET_Tool_PR_00003)

FACET Project Portfolio (2022). Value Chain Model. Available at: [https://www.projectenportfolio.nl/wiki/index.php/FACET\\_Tool\\_PR\\_00002](https://www.projectenportfolio.nl/wiki/index.php/FACET_Tool_PR_00002)

French Environment and Energy Management Agency (ADEME) (2022). Fonds Tourisme Durable – Restaurateurs & hébergeurs, accélérez votre transition écologique. Available at: <https://agirpourlatransition.ademe.fr/entreprises/aides-financieres/2022/fonds-tourisme-durable-restaurateurs-hebergeurs-accelerez-transition>

French Environment and Energy Management Agency (ADEME) (2021). L'Écolabel européen: les économies réalisées dès la première année ont permis l'embauche d'un salarié supplémentaire: Espace Blue Océan. Available at: <https://optigede.ademe.fr/fiche/lecolabel-europeen-les-ekonomies-realisees-des-la-premiere-annee-ont-permis-l'embauche-dun>

### G

Gallaud, D., & Laperche, B. (2016). Circular economy, industrial ecology and short supply chain. John Wiley & Sons. Available at: <https://www.wiley.com/en-us/Circular+economy%2C+Industrial+Ecology+and+Short+Supply+Chain-p-9781119307471>

Galvão, G. D. A., de Nadae, J., Clemente, D. H., Chinen, G., & de Carvalho, M. M. (2018). Circular economy: overview of barriers. *Procedia CIRP*, 73, 79-85. Available at: [https://www.researchgate.net/publication/326066022\\_Circular\\_Economy\\_Overview\\_of\\_Barriers](https://www.researchgate.net/publication/326066022_Circular_Economy_Overview_of_Barriers)

Gaustad, G., Krystofik, M., Bustamante, M., & Badami, K. (2018). Circular economy strategies for mitigating critical material supply issues. *Resources, Conservation and Recycling*, 135, 24-33. Available at: [https://www.researchgate.net/publication/319384099\\_Circular\\_economy\\_strategies\\_for\\_mitigating\\_critical\\_material\\_supply\\_issues](https://www.researchgate.net/publication/319384099_Circular_economy_strategies_for_mitigating_critical_material_supply_issues)

Government of the Netherlands (2017). Environment and Planning Act. Available at: <https://www.government.nl/topics/spatial-planning-and-infrastructure/documents/reports/2017/02/28/environment-and-planning-act>

Government of the Netherlands (2018). Transition Agenda Circular Economy: Biomass & Food. Available at: <https://hollandcircularhotspot.nl/wp-content/uploads/2019/09/Transition-Agenda-Biomass-and-Food.pdf>

Government of the Netherlands (2018). Transition Agenda Circular Economy: Plastics. Available at: [https://hollandcircularhotspot.nl/wp-content/uploads/2018/06/TRANSITION-AGENDA-PLASTICS\\_EN.pdf](https://hollandcircularhotspot.nl/wp-content/uploads/2018/06/TRANSITION-AGENDA-PLASTICS_EN.pdf)

Government of the Netherlands (2018). Transition Agenda Circular Economy: Construction. Available at: <https://hollandcircularhotspot.nl/wp-content/uploads/2019/09/Circular-Construction-Economy.pdf>

Government of the Netherlands (2018). Transition Agenda Circular Economy: Consumer Goods. Available at: [https://hollandcircularhotspot.nl/wp-content/uploads/2018/06/TRANSITION-AGENDA-CONSUMER-GOODS\\_EN.pdf](https://hollandcircularhotspot.nl/wp-content/uploads/2018/06/TRANSITION-AGENDA-CONSUMER-GOODS_EN.pdf)

Government of the Netherlands (2018). Transition Agenda Circular Economy: Manufacturing Industry. Available at: <https://hollandcircularhotspot.nl/wp-content/uploads/2019/09/Transition-Agenda-Manufacturing-Industry.pdf>

Government of the Netherlands (2021). What is considered packaging? Available at: <https://business.gov.nl/regulation/packaging/>

GRO Together (2022). Why GRO?. Available at: <https://gro-together.com/>

Guerra, B. C., & Leite, F. (2021). Circular economy in the construction industry: An overview of United States stakeholders' awareness, major challenges, and enablers. *Resources, Conservation and Recycling*, 170, 105617. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0921344921002263>

H

Haugen, J. (2021). With Aggressive Expansion, Too Good to Go Doubles Down on Commitment to Address Food Waste. Available at: <https://sustainablebrands.com/read/waste-not/with-aggressive-expansion-too-good-to-go-doubles-down-on-commitment-to-address-food-waste>

HM Government (2018). A Green Future: Our 25 Year Plan to Improve the Environment. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/693158/25-year-environment-plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf)

HM Government (2017). The Clean Growth Strategy: Leading the way to a low carbon future. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/700496/clean-growth-strategy-correction-april-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf)

HM Government (2017). The UK's Industrial Strategy. Available at: <https://www.gov.uk/government/topical-events/the-uks-industrial-strategy>

HM Government (2017). Litter Strategy for England. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/630999/litter-strategy-for-england-2017-v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630999/litter-strategy-for-england-2017-v2.pdf)

HM Government (2018). Our waste, Our resources: a strategy for England. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/765914/resources-waste-strategy-dec-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf)

I

Impuls Zeeland (2022). Circulaire oplossen van vrijetijdsector. Available at: <https://www.impulszeeland.nl/nl/meedoen-facet>

InCircle (2020). Castwater online tool. Available at: <https://www.incircle-kp.eu/best-practices/castwater-online-tool/>

InCircle (2020). ConsumelessMed Label in Mediterranean regions. Available at: <https://www.incircle-kp.eu/best-practices/consumelessmed-label-in-mediterranean-regions/>

InCircle (2020). Enhancing sustainable tourism in insular & low-density areas: knowledge platform. Available at: <https://www.incircle-kp.eu>

InCircle (2020). Law 8/2019, February 19th, of waste and contaminated soils of the Balearic Islands. Available at: <https://www.incircle-kp.eu/best-practices/law-82019-february-19th-of-waste-and-contaminated-soils-of-the-balearic-islands/>

InCircle (2020). Promotion of Energy Audits in Small and Medium Sized Enterprises Scheme. Available at: <https://www.incircle-kp.eu/best-practices/promotion-of-energy-audits-in-small-and-medium-sized-enterprises-scheme/>

Interreg 2 Seas PROFIT (2022). Strategy with action plan to stimulate innovation in SMEs. European Union. Available at: [https://www.profittourism.eu/images/Communicatie/FINAL\\_PROFIT\\_Output\\_041.pdf](https://www.profittourism.eu/images/Communicatie/FINAL_PROFIT_Output_041.pdf)

IOVAM: Mechelen. Available at: [https://www.eurochile.cl/wp-content/uploads/2022/03/PRESENTACION-SOFIE-BOUTELIGIER-OVAM\\_.pdf](https://www.eurochile.cl/wp-content/uploads/2022/03/PRESENTACION-SOFIE-BOUTELIGIER-OVAM_.pdf)

Island Innovation (2022). The Balearic Islands Have An Energy Transition Plan Ready. Available at: <https://islandinnovation.co/the-balearic-islands-have-an-energy-transition-plan-ready/>

K

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation & Recycling*, 127, 221-232. Available at: [https://www.researchgate.net/publication/320074659\\_Conceptualizing\\_the\\_Circular\\_Economy\\_An\\_Analysis\\_of\\_114\\_Definitions](https://www.researchgate.net/publication/320074659_Conceptualizing_the_Circular_Economy_An_Analysis_of_114_Definitions)

Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular Economy: The Concept and its Limitations. *Ecological Economics*, 143, 37-46. Available at: [https://www.researchgate.net/publication/318385030\\_Circular\\_Economy\\_The\\_Concept\\_and\\_its\\_Limitations](https://www.researchgate.net/publication/318385030_Circular_Economy_The_Concept_and_its_Limitations)

L

Legifrance (2018). LOI n° 2018-938 du 30 octobre 2018 pour l'équilibre des relations commerciales dans le secteur agricole et alimentaire et une alimentation saine, durable et accessible à tous (1). French Republic: Paris. Available at: <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000037547946/>

Legifrance (2019). LOI n° 2016-138 du 11 février 2016 relative à la lutte contre le gaspillage alimentaire (1). French Republic: Paris. Available at: <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000032036289/>

Legifrance (2016). Décret n° 2016-288 du 10 mars 2016 portant diverses dispositions d'adaptation et de simplification dans le domaine de la prévention et de la gestion des déchets. French Republic: Paris. Available at: <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000032187830/>

M

Manniche, J., Topsø Larsen, K., Brandt, R., & Broegaard, E. H. (2018). Handbook "Destination: A circular tourism economy A handbook for transitioning toward a circular economy within the tourism and hospitality sectors in the South Baltic Region. Available at: [https://circulareconomy.europa.eu/platform/sites/default/files/cirtoinno-handbook\\_eng-rev.-4.pdf](https://circulareconomy.europa.eu/platform/sites/default/files/cirtoinno-handbook_eng-rev.-4.pdf)

Martínez-Cabrera, J., & López-del-Pino, F. (2021). The 10 Most Crucial Circular Economy Challenge Patterns in Tourism and the Effects of COVID-19. *Sustainability*, 13(9), 4940. Available at: <https://www.mdpi.com/2071-1050/13/9/4940>

Ministry for an Ecological and Solidary Transition (2017). Loi de transition énergétique pour la croissance verte. French Republic: Paris. Available at: <https://www.ecologie.gouv.fr/loi-transition-energetique-croissance-verte>

Ministry for an Ecological and Solidary Transition (2020). Réglementation environnementale RE2020. French Republic: Paris. Available at: <https://www.ecologie.gouv.fr/reglementation-environnementale-re2020>

Ministry for an Ecological and Solidary Transition (2018). Roadmap for the Circular Economy: 50 measures for a 100% circular economy. French Republic: Paris. Available at: <https://www.ecologie.gouv.fr/sites/default/files/FREC%20anglais.pdf>

Ministry for an Ecological and Solidary Transition (2020). Territory: Territorial Climate, Air and Energy Plan. French Republic: Paris. Available at: [https://bilans-ges.ademe.fr/en/accueil/contenu/index/page/climate\\_plan/siGras/0](https://bilans-ges.ademe.fr/en/accueil/contenu/index/page/climate_plan/siGras/0)

Ministry for an Ecological and Solidary Transition (2020). The anti waste law in the daily lives of the French people: What does that mean in practice? French Republic: Paris. Available at: [https://www.ecologie.gouv.fr/sites/default/files/en\\_DP%20PJL.pdf](https://www.ecologie.gouv.fr/sites/default/files/en_DP%20PJL.pdf)

N

Nogueira, A., Ashton, W., Teixeira, C., Lyon, E., & Pereira, J. (2020). Infrastructure for the circular economy. *Energies*, 13(7), 1805. Available at: <https://www.mdpi.com/1996-1073/13/7/1805/hfm>

Norfolk County Council (2022). Hemsby Community Cup Pilot. Available at: <https://www.norfolkrecycles.com/wp-content/uploads/2021/09/Hemsby-Community-Cup-Pilot.pdf>

O

Omroep Zeeland (2021). Een duurzame vakantie vieren in een dijk, dan ben je pas milieuvriendelijk. Available at: <https://www.omroepzeeland.nl/nieuws/13846433/een-duurzame-vakantie-vieren-in-ee-dijk-dan-ben-je-pas-milieuvriendelijk>

P

PeelPioneers (2022). PeelPioneers biedt een circulaire oplossing voor sinaasappelschillen die overblijven na het maken van vers sap. Available at: <https://peelpioneers.nl/>

Pottling, J., Hekkert, M., Worrell, E. & Hanemaaijer, A., (2017). Circular Economy: Measuring Innovation in the Product Chain. PBL Netherlands Environmental Assessment Agency. Available at: <https://www.pbl.nl/sites/default/files/downloads/pbl-2016-circular-economy-measuring-innovation-in-product-chains-2544.pdf>

Public Waste Agency of Flanders (OVAM), (2021). Action plan circular food loss and biomass (residual) flows 2021-2025.

Public Waste Agency of Flanders (OVAM), (2017). Food Loss and Packaging. OVAM: Mechelen. Available at; <https://refreshcoe.org/wp-content/uploads/2017/06/2015-Report-OVAM-Food-loss-and-packaging-DEF.pdf>

S

Samen Tegen Voedselverspilling (2022). Hoe #verspillingsvrij Ben jij? Available at: <https://samentegenvoedselverspilling.nl>

Scottish Government (2019). The National Plan for the Scotland's Islands. Available at: <https://www.gov.scot/publications/national-plan-scotland-islands/>

Smart Islands (2018). Smart Islands: Delivering smart solutions to energy, waste, water and sewerage services on the Isles of Scilly and beyond. Available at: <https://smartislands.org/#intro>

Sorin, F., & Sivarajah, U. (2021). Exploring Circular economy in the hospitality industry: empirical evidence from Scandinavian hotel operators. *Scandinavian Journal of Hospitality and Tourism*, 21(3), 265-285. Available at: [https://www.researchgate.net/publication/351174987\\_Exploring\\_Circular\\_economy\\_in\\_the\\_hospitality\\_industry\\_empirical\\_evidence\\_from\\_Scandinavian\\_hotel\\_operators](https://www.researchgate.net/publication/351174987_Exploring_Circular_economy_in_the_hospitality_industry_empirical_evidence_from_Scandinavian_hotel_operators)

Sulich, A., & Soloducho-Pelc, L. (2021). The circular economy and the Green Jobs creation. *Environmental Science and Pollution Research*, 29(10), 1-17. Available at: [https://www.researchgate.net/publication/355038003\\_The\\_circular\\_economy\\_and\\_the\\_Green\\_Jobs\\_creation](https://www.researchgate.net/publication/355038003_The_circular_economy_and_the_Green_Jobs_creation)

T

Tanghe, C. (2021). Eco Beach Award voor meest duurzame stranduitbater. <https://www.focus-wtv.be/nieuws/eco-beach-award-voor-meest-duurzame-stranduitbater>

Tapia, C., Bianchi, M., Pallaske, G., & Bassi, A. M. (2021). Towards a territorial definition of a circular economy: exploring the role of territorial factors in closed-loop systems. *European Planning Studies*, 28(8), 1-20. Available at: [https://www.researchgate.net/publication/348299618\\_Towards\\_a\\_territorial\\_definition\\_of\\_a\\_circular\\_economy\\_exploring\\_the\\_role\\_of\\_territorial\\_factors\\_in\\_closed-loop\\_systems\\_Towards\\_a\\_territorial\\_definition\\_of\\_a\\_circular\\_economy\\_exploring\\_the\\_role\\_of\\_ter](https://www.researchgate.net/publication/348299618_Towards_a_territorial_definition_of_a_circular_economy_exploring_the_role_of_territorial_factors_in_closed-loop_systems_Towards_a_territorial_definition_of_a_circular_economy_exploring_the_role_of_ter)

Teruel Siente (2022). Premio Teruel Siente. Available at: <http://www.teruelversionoriginal.es/turismo/teruelsiente/>

The Malvern (2022). Greening Your Tourism Business. Available at: <https://www.visitthemaalverns.org/industry/greening-your-tourism-business/>

Tinos Ecolodge (2022). Eco Concept. Available at: <https://www.tinosecolodge.gr/eco-concept/>

Too Good To Go (2022). Ready to fight Food waste? Available at: <https://toogoodtogo.co.uk/en-gb>

Travindy (2017). Tomorrow needs today: Martin's Hotels embraces circular economy. Travindy. Available at: <https://travindy.com/2017/05/martins-hotels-circular-economy-supply-chain/>

U

Urban Innovation Actions (2022). A2UFood. Available at: <https://a2ufood.gr/en/>

V

van Keulen, M., & Kirchherr, J. (2021). The implementation of the Circular Economy: Barriers and enablers in the coffee value chain. *Journal of Cleaner Production*, 281, 125033. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0959652620350770>

W

Westtoer (2022). Beleef West-Vlaanderen. Available at: <https://corporate.westtoer.be/nl/provinciaal-reglement-voor-de-toeristische-impulsen>

# 6

## About the FACET project

**The EU Interreg 2 Seas FACET project implements measures to encourage entrepreneurs in the tourism sector to apply circular solutions within their company, thereby creating new sustainable revenue models. With a strong consortium of project partners from Belgium, England, France and the Netherlands, experiments are being conducted with circular applications in the fields of accommodation, waste reduction and circular operations.**

As a coastal region, the 2 Seas region (covering the coastal areas of Belgium, England, France and the Netherlands and connected by the Channel and the North Sea) has traditionally been a tourist destination with a strong impact on the regional economy. However, tourism also entails mass consumption of raw materials and puts pressure on their limited availability in the region, where industry, agriculture and tourism are already competing. Circular solutions are needed to ensure that tourism remains economically beneficial. Moreover, the COVID-19 pandemic has induced a crisis in the tourism and leisure sector; many tourism firms have suffered – many businesses are in stagnation or facing survival challenges. Now is the time to look at how we have organised our society and economy and how we want to build our systems back more sustainably, in a post-COVID era.

Throughout the 2 Seas area, FACET locally develops various practical, accessible, and small-scale pilot and demonstration projects to help entrepreneurs gain practical knowledge and experience to make circular business models. FACET provides expertise and support in setting up these pilots.

**Interreg 2 Seas 2014-2020 is a European Territorial Cooperation Programme for England, France, the Netherlands, and Belgium. The Programme is co-financed by the European Regional Development Fund (ERDF). The objective is to develop an innovative, knowledge and research-based, sustainable and inclusive 2 Seas area, where natural resources are protected, and the green economy is promoted.**

### Project partners



Looking for contact or more information about the project? Visit our website [www.facetwiki.eu](http://www.facetwiki.eu) or follow us on [LinkedIn](#).