# LEADING EXAMPLES OF
# SMART TOURISM PRACTICES
# IN EUROPE

SmartTourismCapital.eu    #EUTourismCapital

SUSTAINABILITY

DIGITALISATION

ACCESSIBILITY

CULTURAL HERITAGE & CREATIVITY

**Title:**

## LEADING EXAMPLES OF
# SMART TOURISM PRACTICES IN EUROPE

This report has been prepared in 2022 for the European Commission,
DG Growth Internal market, Industry, Entrepreneurship and SMEs

**Key Subjects:**

Exchange of best practices, innovative and smart tourism measures, accessibility, sustainability, digitalisation, cultural heritage and creativity

March 2022

This report has been commissioned by the European Commission and prepared by Scholz & Friends Agenda Berlin GmbH European Office. The views and propositions expressed herein do not necessarily represent any official view of the European Commission.

# TABLE OF CONTENTS

# 1. GENERAL BACKGROUND

The European Capital of Smart Tourism is an EU initiative, currently financed under the COSME Programme. It is built on the successful experience of the Preparatory Action proposed by the European Parliament and implemented by the European Commission in 2019 and 2020. The initiative seeks to strengthen tourism-generated innovative development in European cities and their surroundings, increase their attractiveness, and foster economic growth and job creation. It also aims to establish a framework for the exchange of best practices between cities participating in the competition, create opportunities for cooperation and new partnerships.

In line with this overarching definition, the initiative will showcase exemplary practices by tourism destinations in implementing innovative and intelligent solutions in four categories:

*SUSTAINABILITY*          *DIGITALISATION*          *CULTURAL HERITAGE & CREATIVITY*          *ACCESSIBILITY*

# 2. PURPOSE OF THE BEST PRACTICES FROM THE 2022 EUROPEAN CAPITAL OF SMART TOURISM COMPETITION

In 2018, the European Commission launched a first EU-wide competition for the European Capital of Smart Tourism. In 2021, the competition for the 2022 European Capital of Smart Tourism was launched and 30 cities from 16 countries submitted their applications. Bordeaux (France) and València (Spain) won the 2022 European Capital of Smart Tourism titles.

The 2022 collection of best practices has been derived from the applications the cities submitted to the competition. The report showcases the selection of best practices in each category (Accessibility, Sustainability, Digitalisation, Cultural heritage and creativity) and solely presents and relies on the data that the cities have submitted in their applications.

The purpose of this document is to enhance and facilitate the exchange of best practices in

promoting innovative and smart measures and initiatives for tourism destinations in the EU Member States. The report aims at raising awareness about smart tourism tools, measures and projects, sharing the best practices in tourism implemented by cities and strengthening peer-to-peer learning and innovative development of tourism in the EU in general.

The 2019 and 2020 collection of best practices were compiled in the first edition of this report.

# 3. THE 4 CATEGORIES OF THE COMPETITION MAKING TOURISM SMART

For the purpose of the European Capital of Smart Tourism competition, the cities were invited to describe and share their innovative projects, ideas and initiatives implemented under each of the four award categories (Accessibility, Digitalisation, Sustainability, Creativity & Cultural heritage) which helped them to improve their profile as a tourism destination.

As a guidance, the four categories were described as follows, but these descriptions were by no means exhaustive. The cities were encouraged to think beyond these given examples and to demonstrate specific cases, concrete actions and solutions implemented.

## 3.1 ACCESSIBILITY

What resources does a city have to be physically and psychologically accessible to travellers with special access needs, regardless of age, their social or economic situation, and whether they have disabilities or not? Being accessible means to be easily reachable through different modes of transport and with a strong transport system in and around the city. What does the infrastructure look like and how accessible is the city – by car, train, plane, and bike? Apart from the infrastructure itself, how can you make tourism offers barrier-free, physically and psychologically?

Accessibility does not only entail being a barrier-free destination, it also encompasses services that are multilingual and, for example, digitally available to all travellers or visitors– regardless of age, cultural background or any physical disability.

## 3.2 SUSTAINABILITY

What opportunities does a city have to preserve and enhance the natural environment and resources while maintaining economic and socio-cultural development in a balanced way? How are natural resources (including innovative environmentally friendly measures) managed in a tourism destination and are there resource-efficiency measures implemented, and actions aimed at combating or adapting to climate change? Being sustainable goes even further – are there measures aimed at reducing tourism seasonality and involving the local community? How can cities as tourism destinations contribute to local employment and a diversification of local economies?

Therefore, being sustainable does not only mean to manage and protect your natural resources as a city, but to reduce seasonality and include the local community.

## 3.3 DIGITALISATION

Is the city supporting tourism businesses in the development and use of digital skills and tools? How does the city support digitalisation of tourism services?

Digital tourism means offering innovative tourism and hospitality information, products, services, spaces and experiences adapted to the needs of the consumers through ICT-based solutions and digital tools. It is about providing digital information on destinations, attractions and tourism offers as well as information on public transport and making attractions and accommodation digitally accessible.

## 3.4 CULTURAL HERITAGE & CREATIVITY

Is the city making resourceful use of its cultural heritage and creative industries for an enriched tourism experience? What actions are implemented to render recognition and to incorporate the tangible and intangible heritage of art, history and culture in its centre and surroundings, in the enhanced tourism offer? How is cultural heritage and creativity used to attract tourists from countries outside the EU in particular and exploit synergies between tourism and cultural and creative industries?

The focus on cultural heritage and creativity means protecting and capitalising on the local heritage as well as cultural and creative assets for the benefit of the destination, the industry and tourists.

*SmartTourismCapital.eu*    *#EUTourismCapital*

# 4. PRESENTING BEST PRACTICES

## 4.1 BEST PRACTICES IN ACCESSIBILITY

### 4.1.1 Accessibility for all

**4.1.1.1 Low-income accessibility; Bordeaux; Karlsruhe**

**Holidays for low-income families; Bordeaux:** In partnership with the association 'Vacances et Familles', the Bordeaux Tourist Office provides support to help low-income families enjoy a holiday, including accommodation support and on-site entertainment, as well as assistance before, during and after their stay.

Find out more at: https://congres.bordeaux-tourisme.com/sites/bcb/files/inline-files/Présentation%20stratégie%20durable%20OTCBM.pdf

**Inclusion and access for everybody to cultural attractions; Karlsruhe:** The city offers wide access and creates incentives for people from all social and economic backgrounds to partake in its tourism and cultural offerings. Targeted people marketing serves to support the development of differentiated offers such as vacation packages, events or cultural highlights for people of all ages. Especially in the cultural sector, Karlsruhe strives to provide inclusive offerings so that, for instance, financially less well-off citizens can visit museums free of charge every Friday afternoon. The Oberwald Zoo also offers a free insight into the biodiversity of numerous wild animals in their natural habitat. The Grötzingen indoor swimming pool is another recreational opportunity offered for free in daily operation. Large events like DAS FEST are subsidized to encourage and ensure cultural participation for all citizens and guests and many museums offer alternative tours for people with walking or visual disabilities. Due to Karlsruhe's location close to France and Switzerland, many exhibitions are multilingual and deliberately aim to address an international audience.

**4.1.1.2 Accessible city routes; Bordeaux; Athens; Venice; Padua**

**Bordeaux, Destination for all; Bordeaux:** In Bordeaux, inclusion is at the heart of public policies, so that the region is accessible for all. Bordeaux 'Tourism and Handicap' certified routes are accessible for those with mobility or hearing disabilities, and four map displays for the visually impaired have been installed. The Bordeaux Tourist Office has also developed a dedicated guide for those with disabilities and contains all the services available to people with reduced mobility. The guide is regularly updated, considering the feedback and needs of users. Additionally, the 'City and Handicap' task force has helped to make major cultural events such as the Bordeaux Wine Festival and the Bordeaux River Festival accessible for visitors with special needs. The municipality has paid particular attention to adapting sites where these events take place with e.g., access ramps, adapted sanitary facilities, zones reserved exclusively for use by persons of reduced mobility and human assistance.

Find out more at: https://www.bordeaux-tourism.co.uk/accessibility

**"The Grand Walk of Athens"; Athens:** In summer 2020, Athens implemented an initiative called "The Great Walk of Athens" that transformed streets into walking and biking paths in areas heavily utilized by cars. The pilot phase of a long-term redevelopment program, the Grand Walk generated wide discussion about urban infrastructure as a public good. Helping residents participate in the design of public spaces helps raise



© City of Athens

awareness of streets that need to serve many different purposes and populations with differing privileges and abilities.

Find out more at: https://news.gtp.gr/2020/07/17/grand-walk-of-athens-project-enhance-citys-tourism-identity/

**Dedicated accessible tour through the city; Padua:** Padua has designed an accessible tourist itinerary, especially for those with physical disabilities. The tour includes a 2.5 km route that can be done on foot or with mobility aids such as wheelchairs.

**Exploration made barrier free; Venice:** The city has introduced an "itinerary without barriers", an itinerary to explore and experience the city specifically designed for wheelchair users visiting Venice. These itineraries take the visitor throughout Venice along specifically designed and accessible routes for wheelchair users offer suggestions on visiting the city despite the obstacles that it's the city with all its bridges entail. These routes and itineraries have been designed by the Office for the Elimination of Architectural Barriers of the Municipality of Venice and have been created in collaboration with resident with limited mobility living in the city. Through this collaborative process, Venice has taken the residential experience as a platform for creating a better tourist experience for everyone.



© Giorgio Bombieri Comune di Venezia

Find out more at: https://www.veneziaunica.it/en/content/itineraries-without-barriers

### 4.1.1.3 Accessible infrastructure; Bordeaux; Dublin; Genoa; Ljubljana; Szczecin; Venice

**Accessible transport system; Bordeaux:** Bordeaux's public transport network is 100% wheelchair accessible, thanks to large sliding doors, step-free access and reserved spaces. In the city, the creation of a pedestrian GR-accredited circuit follows the same dynamic. The network of footpaths runs for 160 km through the suburbs and green spaces. It is

easily accessible via public transport and well-signposted. The circuit provides a diverse range of landscapes and experiences and constitutes high-quality local tourism that is open to all. It is even possible to stay in a natural space for free in "suburban refuges", some of which are veritable works of art, not just quirky accommodation options.

Find out more at: https://www.infotbm.com/en/accessibilite.html
https://www.infotbm.com/en/practical-information/accessibility.html

**Assistance to those with autism; Dublin:** DAA knows 1% of passengers have reduced mobility challenges and is leading the way in accessible travel by establishing a Disability Users Group, comprising representatives from a broad range of organisations catering for individuals with specific disabilities. Decisions relating to future developments are discussed with

© Dublin Airport 2022

diverse groups with specific needs. For example, DAA has co-designed and implemented 'important flyer wristbands and lanyards' so that passengers with Autism could self-identify as needing additional help. The wristband can be shown to any Dublin Airport staff member at security or passport control or any area where help is required, enhancing the visitor experience to the airport and city. Additionally, DAA provides a sensory room to calm passengers who might feel overwhelmed in a busy airport. Designed for passengers with autism, dementia, cognitive impairment, or other special needs the room has been very successful. Among other innovations are an assistance dog relief room, and induction loop amplification points around the airport for passengers with hearing difficulties. In 2020 DAA and Hack Access held an accessibility hackathon focused on improving the customer experience for passengers with accessibility challenges. In 2019, the DAA mobility assistance provider conducted over 340,000 interactions. It is planned the success of the programme will now be replicated in other international airports.

Find out more at: http://www.dublinairport.com/at-the-airport/help-and-support/travelling-with-autism
https://www.dublinairport.com/at-the-airport/help-and-support/sensory-room/sensory-room

**Barrier-free architecture; Genoa:** The goal of the city is to enable everyone to participate fully in all aspects of life. As a measure to ensure equal access to the physical environment, transport, information and communication, Genoa's administration has implemented PEBA – the Plan for the Elimination of Architectural Barriers. The PEBA analyses the municipal area from the point of view of motor and sensory accessibility, dividing it into 94 Areas, i.e. portions of the territory where public functions of importance and interest for the citizen are concentrated, returning a map with 4 colors depending on the degree of presence or absence of architectural barriers: green (accessible), yellow (partially accessible), orange (partially inaccessible) and red (inaccessible). A very important aspect to underline is that Genoa is the first Italian city with a totally georeferenced PEBA and with data free and accessible to all on dedicated portals (open data). For tours and maps, the relative level of accessibility has been indicated for the main points of interest in Genoa, such as monuments, museums, universities or historical shops. And five accessible "thematic itineraries" have therefore been identified: Art and culture, Education, Free time, Business, Other Paths.

Find out more at: https://smart.comune.genova.it/contenuti/peba-piano-eliminazione-barriere-architettoniche

**User-friendly and disabled-friendly transportation; Ljubljana:** For physical accessibility, Ljubljana's city buses are especially user-friendly for people in wheelchairs, with other disabilities and children in strollers. Besides installed ramps and reader boards on most of the buses, audio announcements help tourists and visitors to identify their stop. Additionally, six electric vehicles ("Kavalirs") have been introduced in the city center for the elderly and disabled

© Giorgio Bombieri Comune di Venezia

and offer free rides. An emission-free urban electric train also enables disabled people to travel to main attractions while listening to audio guides. The latest addition to a user-friendly experience for people in wheelchairs is the free rental of two electric attachments allowing a more comfortable sightseeing experience. Attachments can be rented at the

Tourist Information Centre (TIC). This is an innovative service since TIC is the first tourist information centre in Europe that offers this option.

Find out more at: https://www.visitljubljana.com/en/visitors/travel-information/essentials/accessibility-of-ljubljana-by-wheelchair/ and https://www.visitljubljana.com/en/visitors/travel-information/getting-around/kavalir-getting-around-the-city-centre-by-electric-car/ and https://www.lpp.si/en/urban-electric-train

**Overcoming historic and unequal architecture; Venice:** Venice has a unique urban landscape that is dominated by the numerous bridges dotting the city centre allowing visitors and residents alike to explore and experience the city. By creating accessible bridges, the municipality has started to adapt this architectural barrier to accommodate all visitors with limited mobility. These accessible bridges have been equipped with handrails and a facilitated step ramp for ease of access both to the resident and the visitors.

Find out more at: https://www.researchgate.net/figure/Ponte-delle-Sechere-an-example-of-a-fully-accessible-bridge-In-this-case-the-bridge-has_fig5_338854836

**Sea legs are a thing of the past; Szczecin:** As a popular yachting destination, Szczecin has introduced an elderly friendly marina concept for the sake of the elderly sailors who are coming to visit the city by boat. The newly constructed marina has a specially designated mooring berth dedicated for the elderly. It is equipped with ramps and adjusted toilets as well as an extra step that makes stepping of the boat easier. The marina staff are specifically designated to help any elderly sailors wishing to have some assistance mooring their vessel if given prior notice.


© Visit Szczecin

Find out more at: https://northeast-marina.pl/en/

**4.1.1.4 Accessible beaches; Gdynia; Palma; Ravenna; San Sebastian; València**

**Facilitated access to the beach for people with disabilities; Gdynia:** Entrances to the city center beach are equipped with posts for the blind with pictograms Braille directions and wooden ramps. A playground with equipment for children with disabilities is also provided along with umbrellas for sun protection. The city centre beach also offers toilets and showers for people with disabilities and people with mobility impairments can take advantage of bathing chairs at the bathing site (so-called amphibian). The city's lifeguards have been trained to communicate with people with sight, hearing or multiple disabilities and have acquired methods and techniques for transferring, supporting and assisting people enjoying the bathing sites.

Find out more at: https://www.inyourpocket.com/gdansk/travelling-with-a-disability-in-gdansk-sopot_77157f and https://civitas.eu/sites/default/files/webinar_22.02.2016_gdynia_apawlowska.pdf

**Beach Guide is redefining accessible beaches; Palma:** The Guide for Accessible Beaches in Palma is available in 4 languages and provides detailed information about the beaches, infrastructure, and services available at the city's beaches. Five of the city's beaches are certified as being inclusive (Universal Accessibility Management System Certificate) and the guide to these beaches underlines the city's commitment to helping as many people as possible reach and enjoy the beach.

Find out more at: https://www.palma.cat/portal/PALMA/contenedor4.jsp?seccion=s_lloc_d10_v5.jsp&codbusqueda=638&codResi=1&codMenuPN=1811&codMenu=826&layout=contenedor4.jsp&layout=contenedor4.jsp&language=en

**Surf and Sea for all; Ravenna:** Ravenna has launched the BEST Project or the Beaches accessible to all which grants everyone the access they need and deserve to Ravenna's beaches with special seats, amphibious armchairs and wheelchairs allowing all people to enjoy the beach and the sea.

Find out more at: https://www.turismo.ra.it/en/nature-seaside/beach-resorts-ravenna-en/accessible-beaches/

**Assisting beachgoers to get to their destination; San Sebastian:** La Concha beach offers an assisted bathing service for the elder or for people with a disability who want to experience the joys of going into the sea. In addition, the beach comes with an audio guide that helps visitors get to know the beach through an aural medium.

Find out more at: https://www.sansebastianturismoa.eus/en/to-do/beach-parks/let-s-go-to-the-beach

**Bringing accessibility up to a standard; València:** As a participant in the MITOMED beach project, València is constantly striving to excel in delivering a sustainable and accessible experience on its beaches. As a result, the beaches have been equipped with walkways and accessibility features which are measured and constantly updated in line with the best practices to accommodate everyone wishing to enjoy a day at the beach.

Find out more at: https://fundacion.visitvalencia.com/en/sustainability/projects/mitomed

### 4.1.1.5 Diversity & Accessibility; Aarhus

**LGBTQ+ friendly, Aarhus:** Accessibility is also about inclusion and Aarhus' city council has a strong focus on making Aarhus a better and more attractive city and a better and more attractive workplace for LGBTQ+ persons. As part of its commitment to LGBTQ+ community, Aarhus is member Rainbow Cities Network, actively working to improve conditions for LGBTQ+ citizen. Aarhus also hosts 'KØN – Gender Museum Denmark' presenting the cultural history between genders, equality, body, and sexuality.



© Frame & Work

Find out more at: https://www.rainbowcities.com/cities/aarhus/

## 4.1.2 Accessibility of information

**4.1.2.1 Accessible city guides; Athens; Ljubljana; Florence; Ravenna; València**

**Accessible Athens for All; Athens:** In partnership with the organisation Me Alla Matia (Through the Eyes of Others), 'This is Athens' - the city's visitors' guide, is making stories of adventure, hidden destinations, and schedule of events accessible to all visitors. The team created an accessibility guide that raises awareness about places in the historic city centre that are technically accessible but cannot be reached from the surrounding area. Guidance photos show uneven surfaces, ramps, and barriers. This process helped the municipality to recognize the urgency and quickly deliver fully accessible routes by building ramps and removing barriers. The guide is published for residents and visitors in Greek and English, with four routes designed for blind pedestrians and four designed for users of wheelchairs.

Find out more at: https://www.thisisathens.org/whats-new-december-2021-accessible-athens

**Locations with wheelchair ramps; Ljubljana:** Both Tourist Information Centres in Ljubljana have wheelchair ramps at the entrance and the Slovenian Tourist Centre has installed lower counters for easier interaction with people on wheelchairs. The city of Ljubljana has started with the project of setting up mobile wheelchair ramps (10 in 2021) in front of restaurants and shops in the historical city centre, thus improving the accessibility at that destination. Further wheelchair-accessible locations can be found on the 'Ljubljana by Wheelchair' app that gives advice on more than 130 locations (restaurants, accommodation, shops, accessible toilets, sights etc.). The city also offers playgrounds for children with disabilities and many of them include training stations for the elderly. Ljubljana was awarded the Accessible Tourism Joint Award 2016 for its accomplishments in traffic safety for children and people with disabilities.

Find out more at: https://www.ljubljanabywheelchair.com and https://www.visitljubljana.com/en/visitors/travel-information/essentials/accessibility-of-ljubljana-by-wheelchair/

**FeelFlorence Platform; Florence:** The FeelFlorence platform has dedicated sections on barrier-free tourism, cultural itineraries, guided tours, events, fairs, markets, and facilities. Thanks to their qualified staff, All Infopoints ensure assistance in more than 5 foreign languages and International Sign Language via frontend and call centre service. Moreover, Professional Tourist and Environmental Guides are available, each of them a specialist in their field and constantly trained in courses organised by Municipality of Florence, Chamber of Commerce, business associations, etc. Appropriate tours and experiences are elaborated with the precise aim to include different types of tourists and city users. The complete museums system is equipped with technology designed to meet different needs from various target groups.

Find out more at: https://www.feelflorence.it

**Exploration through Poetry; Ravenna:** The "Silent Play per Dante" projects visitors straight into the poetry of Dante Alighieri. Accompanied by an engaging narrative voice visitors can visit some of the symbolic places of the city while listening to some of Dante's most famous lines.

Find out more at: https://www.ravennaexperience.it/it/activity/299415/silent-play-per-dante-visita-guidata-immersiva



© Viral Passport

**Accessibility as comprehensive as never before; València:** The València Accessible Guide features all the information on the accessibility of hotels, restaurants, museums, monuments and touristic services throughout all of València. The guide has been assembled in an easy to access and understand manner so that all visitors have the opportunity to discover and plan their trip to València that best suits their needs and ensures that their visit to the city is as comprehensive as it should be. The guide is available online and free to download for anyone who is interested and/or planning a trip to València. The guide is a bit step towards offering a detailed assortment of information for potential visitors and goes a long way in collecting the relevant information to ensure an accessible visit to the city.

Find out more at: https://www.visitvalencia.com/en/valencia-accesible

### 4.1.2.3 Accessible tours; Florence

**Inclusive touristic tours for people with disabilities; Florence:** People with disabilities can access Civic Museums for free and find a tailored cultural offer carefully designed in collaboration with key stakeholders. For instance, multi-sensory visit routes are designed conjointly with the Blind Union, allowing blind people to enjoy cultural heritage wonders though touch, smell, sound, and spatial dimension sensorial experiences. For hearing-impaired individuals, IS language tours are organised in collaboration with Deaf Organisation. Virtual routes of physically inaccessible sites are offered to those with reduced mobility and special project for Alzheimer's or cognitive impairment with narrative and interactive paths in the museums ("Museum in a suitcase") is accessible. Similarly, four itineraries have been designed, from 2 to 8 km along the Arno River with Sup4All project, that brings together tourism, accessibility, and sport, and which can be modulated according to the participants' needs to make them accessible to all.

Find out more at: https://www.visittuscany.com/en/ideas/accessible-museums-in-florence/

### 4.1.2.4 Accessible citizens engagement; Athens; Aarhus

**Enhancing citizens' engagement for better policy-making: Athens:** A vibrant civil society has emerged in the city, with an increasing number of community groups taking the initiative to improve their neighbourhoods and solve pressing issues on the ground. In those circumstances, many projects in Athens have been supported by enhanced stakeholder and resident engagement that was pioneered by synAthina, the social innovation platform of the

City of Athens that engages citizens in problem-solving and reform. The synAthina platform has been the first model of inclusive government in Greece and a systematic mechanism to collect and facilitate the participation of residents and visitors in developing sustainable solutions for the City of Athens. One of its more relevant initiatives is Co-Athens, an additional framework for refugees who have received asylum to collaborate with other residents, citizens' initiatives, and local authorities in the design and implementation of small-scale urban interventions. Selected groups receive funding and support to carry out activities that will have a meaningful and positive impact for the city, and an investment in human capacity that builds from the bottom-up to resolve city challenges and empower refugees.

Find out more at: https://www.synathina.gr/en/synathina/about-us.html and https://oecd-opsi.org/innovations/synathina-platform/

**ReThinkers volunteer programme; Aarhus:** Aarhus' commitment to enhance its citizens' engagement plays an important role in the city's development. One of the unique and significant programmes in Aarhus is the 'ReThinkers', a project in which volunteers perform hospitality tasks, support the city's cultural organisations, events, and projects with different tasks. Thanks to private and public donations, 'ReThinkers" could continue to prosper as a permanent concept and today it makes up an invaluable resource for the city, a strong brand for Aarhus and source of great local pride.


© Per Bille

Find out more at: https://www.visitaarhus.com/corporate/volunteer-aarhus/become-volunteer

### 4.1.2.5 Accessible tourist information offices; Braga; València

**Tourist Office; Braga:** Mobile devices are available for the visually impaired, hard of hearing, those with motor, touch, and cognitive issues, allowing for access to tourist

information, so that everyone can enjoy their stay in Braga independently. The Tourist Office also has tourist brochures in Braille to cater for the visually impaired.

Find out more at: https://www.tur4all.com/resources/posto-de-turismo-de-braga

**Hearing is believing; València:** The main tourist information office offers the modern Visualfy system for people with hearing loss. This innovative AI system detects relevant alerts in the environments and sends visual notifications to the user's smartphone, smartwatch or smartband through sound. By taking this step forward, València is not only going the extra step to ensure that all visitors are afforded the same degree of accommodation but in doing so is implementing a smart approach to making its tourist information services more accessible.

Find out more at: https://www.visualfy.com/visualfy-public-admins/

**4.1.2.6 Accessibility through digitalisation; Porto; Florence; Gaziantep**

**Innovative Signage makes world of colour accessible to colour blind, Porto:** Born in Porto, the ColourADD has reached worldwide acclaim as an innovation in helping people who are colour-blind participate in the colour dominated world of signage. Here in the city, it appears on tourist maps, flags and Ecopoints on the beaches and on car parks to help everyone navigate, understand, and feel welcome to an accessible experience of the city.

Find out more at: http://www.coloradd.net/imgs/ColorADD-About-Us_0315.pdf

**KIMAP - navigation app for disabled people; Florence:** The historic centre of Florence presents some objective difficulties for visitors with reduced mobility (especially in the oldest area of the city: narrow pavements, cobblestone pavements, uneven surfaces). In recent years the city has provided a kit (IT/EN) to facilitate and encourage tourism for disabled people which also includes the Kimap APP, which can be downloaded for free. Kimap allows users with mobility difficulties to find the most accessible and suitable path to reach destinations. The app provides 4 tour guides with historical-artistic itineraries connected to city mapping in open data for barrier-free tourism to explore the city in

complete autonomy. The maps are constantly updated thanks to modern techniques for detecting road surfaces providing real-time information and optimizing navigation for people with wheelchairs, electric hand-bikes and scooters, family with baby strollers (updating accessible routes automatically, time and distance, providing voice assistant). Moreover, while used, Kimap automatically detects data and collects inputs from the users' community. Bottom-up actions to co-create accessibility mapping by using information from the users, who become themselves data' collectors, ensuring an easy and timely update with reasonable investment. In addition, crowd-mapping events permit the involvement of different mappers including associations and committees of people with disabilities in order to cover a large part of the city (e.g. crowd-mapping experience in the Anconella Park led to the identification of the interventions improving the accessibility to the area).

Find out more at: https://kimap.it/en/

**Gaziantep Card mobile application as means of support for disabled citizens using public transportation:** With the Gaziantep Card mobile application, the city is supporting its disabled citizens by guiding them to stops/stations, with audio and visual assistance. When at the stop, disabled people can send information to the vehicle of the transport line they want to use via Gaziantep Card mobile application which then notifies the vehicle driver that a disabled passenger is waiting at that stop. Moreover, an external announcement system installed on all municipal buses ensures that disabled citizens waiting at the stop have access to the vehicle they aim to use without any help as it reads the line code at each stop.

Find out more at: https://gaziantepkart.com.tr

## 4.2 BEST PRACTICES IN SUSTAINABILITY

### 4.2.1 Combatting or adapting to climate change

**4.2.1.1 Urban biking; Rotterdam; Karlsruhe; Dubrovnik**

**How to rethink urban planning and balance; Rotterdam:** Rotterdam's inner "City Lounge" is a concept plan that is designed to create a balance between cars, cyclists, pedestrians, and public transport for a more attractive living environment. The clear objective: to increase the share of clean trips in the city. The centrepiece of the City Lounge is the new Coolsingel, a dual bus carriageway which goes straight through the city centre is now a green boulevard with natural stone pavements and a wide pedestrian promenade with a two-way cycle path. By doing so, the city of Rotterdam has demonstrated that creating space for cars is now a thing of the past and the city has become more accessible to clean forms of transport.

Find out more at: https://thecityateyelevel.com/stories/rotterdam-inner-city-creating-a-city-lounge-for-all/



© Jan van der Ploeg for the municipality of Rotterdam

**A bicycle-friendly city supported by NaturRADtour; Karlsruhe:** Karlsruhe was named Germany's most bicycle-friendly major city for the second time in a row in 2020. It is distinguished by its extensive network of bike paths and the unique NaturRADtour. With the NaturRADTour, visitors can explore natural areas, protected areas and green oases. The 48 kilometers of the tour run through numerous nature reserves within the city limits. As a result, the share of cycling in the city's total traffic has already been increased to over 30%. This is also promoted by the comprehensive expansion of environmentally friendly bicycle rental systems.

Find out more at:  https://www.karlsruhe-erleben.de/en/freetime/cycling/naturradtour



© KTG Karlsruhe Tourismus GmbH, Foto: Fabry

**Changer Cargo Bike (CCCB); Dubrovnik:** The use of cargo bicycles across EU cities has proven to be a very successful model for solving the problem of unloading cargo, especially in their pedestrian zones. As part of the EU pilot project City Changer Cargo Bike (CCCB), the City of Dubrovnik procured four electric cargo bikes. They were presented to the public together with the advantages of their use in the historic centre, where the pilot project is being implemented, and where the use of such bicycles for delivery could

© KTG Karlsruhe Tourismus GmbH, Foto: Fabry

make everyday life easier for caterers, traders, delivery services and citizens. Through this project, the CCCB wants to demonstrate the benefits of the solution, raise awareness in the public and private sectors, reduce pollution and congestion with motor vehicles, and improve the safety and use of public areas.

Find out more at: https://civitas.eu/projects/city-changer-cargo-bike

**4.2.1.2 Sustainable transportation; Izmir; Helsinborg**

E**co-friendly, economical, and sustainable transportation policy; Izmir:** For an environmentally friendly and sustainable transportation policy, Izmir's administration has implemented many infrastructure and incentive projects to reduce motorized transportation and to increase bicycle and pedestrian transportation. The "Izmir Bicycle and Pedestrian Action Plan" has added 84 km of bike paths, a bike rental system BİSİM with 55 stations and 890 bikes. There are 120 tandem bikes in BİSİM stations especially for the use of blind people

and 120 BİSİM bikes can be used by children. To underline this endeavor, the Metropolitan Municipality has established free repair and parking spots throughout the city.

Find out more at: https://www.bogaziciproje.com.tr/en/our-projects/izmir-cycling-and-pedestrian-transport-action-plan and https://www.izmir.bel.tr/en/rent-a-bicycle---bisim-/508/2169

**The world's first electric-powered ferry line; Helsingborg:** Helsingborg's location on the Öresund strait also allows visitors to come to the city by boat. The ferry company ForSea has not settled for carbon heavy transport alternatives but has gone a step further. ForSea became the first ferry company in the world to make their ferries battery-powered, with the batteries being charged continuously. While previously powered with conventional fossil fuels, the ferries are now charged during the short time when docked at Helsingborg or Helsingör and taking vehicles and passengers to disembark and embark.

Find out more at: https://www.forseaferries.com



© ForSea

**An accessible and climate-neutral airport; Helsingborg:** The Ängelholm Helsingborg Airport aims to be one of Sweden's leading airports in terms of climate and sustainability. The whole world can be reached from the airport via Stockholm, with regular daily departures available. The airport has prioritised the reduction of its $CO_2$ emissions for many years is about to become climate-neutral by 2022. Becoming a climate-neutral airport was made possible by the Airport Carbon Accreditation scheme which Ängelholm Helsingborg Airport will complete by 2022. Some examples of how the airport's $CO_2$ emissions have been reduced include in-house solar power, climate-smart heating from recycled energy, charging stations for electric cars, LED-lighting, solar-powered plane steps and in-house energy-effective plane heating. Moreover, all of the airport's vehicles are powered by electricity or are 100% fossil-free fuel. The planes are powered by mixed bio-aviation fuel reducing their emissions by up to 80%.

Find out more at: https://www.angelholmhelsingborgairport.se/2020/12/10/fly-green-fund-levererar-drygt-15-ton-bioflygbransle-till-angelholm-helsingborg-airport/ and https://flygreenfund.se/agh/

**4.2.1.3 Alternative means of transportation; Genoa; Karlsruhe; Marbella; Maribor**

**Metrominuto Tour and Maps; Genoa:** Metrominuto Genova is a map like that of public transport designed for pedestrian routes, in which the most significant places are represented as stops on various pedestrian lines connected to a network. Genoa has implemented this map to rethink the way of understanding travel, the relationship with private vehicles, the relationship between the road and the urban fabric, creating the opportunity to discover and rediscover the Superba in unexpected ways with pedestrian paths. The aim is to show users how convenient it is to leave vehicles at home and to walk to destinations, without having to worry about traffic or parking and to enjoy the beauty of the city.

Find out more at: https://www.visitgenoa.it/en/node/28795

**"Kombilösung"; Karlsruhe:** The "Kombilösung" is the inner-city streetcar tunnel starting in 2021 and offers further incentives for residents and visitors to switch to public transport. Gas and electric-powered vehicles are already being tested in bus operations,

© KTG Karlsruhe Tourismus GmbH, Foto: Fabry

and targeted investments are being made in research into autonomous driving. The area-wide connection to the Stadtmobil car-sharing platform - where Karlsruhe is number one nationwide with almost 15,000 participants - and the kvv.nextbike rental bike system encourage citizens and visitors to use resources sparingly. The planned linking of tourist offers with the regiomove mobility network creates incentives for locals and visitors to organize their stay in Karlsruhe and discover the surrounding area.

Find out more at: https://www.diekombiloesung.de/ and https://www.regiomove.de/

**Eco-friendly city and free transport; Marbella:** With respect to the environment, the city is encouraging its citizens to forego vehicles by offering a public transport service which is free of charge. Marbella is the first Spanish city to offer that to its residents. This, in turn, has increased the use of public transport compared to private transport. Due

to the increased demand, the city has absorbed two more bus lines that belong to the regional network and are included in the local network. Of the 19 buses that make up the public transport network, five of them have hybrid technology promoting low emission by public transport. Additionally, electric vehicles can make use of installed charging points.

**'Maister' as environmentally friendly transport; Maribor:** Dedicated to green tourism, the city offers an electric mini vehicle named Maister that drives around the narrow center of Maribor and the pedestrian area free of charge. The city intends to give plenty of options for tourists and locals to travel around the city with minimal environmental impact. Maister is intended for all residents, visitors of the town and tourists, elderly, people with limited mobility, and for parents with children and takes users anywhere they want within the city center.

Find out more at: https://www.visitmaribor.si/en/what-to-do/transports/6314-

**4.2.1.4 Sustainable engagement; Athens; Bordeaux; Copenhagen; Helsingborg; Izmir**

**Athens Green Business Toolkit; Athens:** Athens is conducting a destination assessment in partnership with the Global Sustainable Tourism Council to gain a better picture of how heat and climate change could impact tourism across the public and private sector. Stakeholder interviews and workshops help to address responsible tourism with hotels, food & beverage services, tour providers, and stakeholders across the local industry. Meanwhile the Athens Green Business Toolkit mobilizes financing for small businesses to upgrade the appearance and energy efficiency of their storefronts, helping to enhance perceptions about sustainability, urban well-being, and innovation.

Find out more at: https://www.athina984.gr/en/2021/04/26/o-dimos-athinaion-chrimatodotei-tis-athinaikes-epicheiriseis-me-stocho-tin-energeiaki-toys-anavathmisi/

**More citizen engagement on sustainable matters; Bordeaux:** Bordeaux is seeking to nurture a dialogue. Surveys about the public perception of tourism are conducted regularly with residents and visitors by TCI Research. Between 2018 and 2021, residents considered

that we are taking these issues into account more and more (up 9 points). The first public forum on sustainable tourism was held in May 2021, gathering 115 attendees. Over 780 ideas were put forward by residents, associations, institutions, elected representatives and professionals from the tourism sector. Focus groups are now meeting to propose a long-term sustainable tourism strategy regarding leisure activities, business travel and local tourism.

Find out more at: https://www.bordeaux-metropole.fr/Actualites/Economie-consultation-autour-de-la-future-strategie-metropolitaine

**Go sustainable, GoGreen; Copenhagen:** GoGreen Denmark is a business network for companies that take a social responsibility in terms of providing and promoting sustainability. All the companies and brands involved with GoGreen live up to high sustainability criteria, which are defined according to the products and service they provide. With GoGreens new sustainability App – GoGreen Guide – tourists and locals can easily find their way to sustainable products and services. To help organizers and businesses host more sustainable large conferences, meetings and events in Copenhagen, Wonderful Copenhagen has developed a digital Sustainability Guide.

Find out more at: https://gogreendanmark.dk/download-app-gogreen-guide/

**Helsingborg as a self-marketing destination; Helsingborg:** Helsingborg as a self-marketing destination is a project aiming to develop a sustainable tourist destination with the hospitality

industry playing a vital role. The project is a collaboration between eleven municipalities in the region which aim to create a destination filled with ambassadors. This involves cooperation with the hospitality industry to develop a strategy for the region to become a sustainable tourist destination. Self-marketing requires engagement and pride from the local hospitality companies and also requires improved knowledge about the region. The municipalities and the hospitality industry therefore agreed on three key aims for the project: 1. A destination filled with ambassadors, 2. A destination that is balanced, 3. An innovative destination.

Find out more at: https://www.citynationplace.com/digital-transformation-place-branding

**Producer markets by locals; Izmir:** The Metropolitan area of Izmir has established producer markets and is involving the local people to bring both the producer and the consumer directly together. Markets of that kind include Pagos Producer's Market, Alaçatı Herb Festival, Sığacık Market etc. These markets are determined as a part of the 'farm to fork' approach and play a role in expanding cultural traditions.

Find out more at: https://www.raillynews.com/2019/07/ease-of-access-to-the-pagos-manufacturer-market-in-velvet/ and https://www.visitizmir.org/en/destinasyon/11482  and https://www.tripadvisor.de/Attraction_Review-g652375-d8671764-Reviews-SIgacIk_Village_Market-Seferihisar_Izmir_Province_Turkish_Aegean_Coast.html

**4.2.1.5 Sustainable events; Bordeaux; Aarhus; Copenhagen; Genoa; Maribor**

**A city for environmental-friendly events; Bordeaux:** The BCB helps event organisers create a positive impact on the environment (carbon footprint calculation, reduction, and compensation), on society (partnerships proposed with a panel of 35 local associations) and on the economy (working with our ambassadors to attract conventions relating to our local areas of expertise). In 2021, 9 conventions are being planned (51,850 convention days, generating an estimated €15 million local profit), thanks to the ambassadors of 'Le Club des Ambassadeurs de Bordeaux' (350 members). Finally, a local measure was enacted in 2018 to regulate the phenomenon of collaborative platforms (a maximum of 120 days per year for private rental, compulsory online declaration), spreading the presence of tourists across the territory and reducing the strains on real estate. 726 accounts were closed between 2018 and 2019.

Find out more at: https://congress.bordeaux-tourism.co.uk

**The Green Conference and Event Handbook; Aarhus:** VisitAarhus, is certified as a 'Green Tourism Organisation' and around 70% of all hotels in Aarhus already hold an official, international eco-certification, such as Green Key and Nordic Eco- Label, to protect the environment within requirements that entail reducing energy and water use, CO2 emissions and waste generated. Thanks to this proactive approach to sustainability, Aarhus has capable of successfully host high-profile events such as the launch of the Michelin Guide Nordic Countries in 2019 in an environmental-friendly way. "The Green Conference and Event Handbook" offers checklists and guidance from Aarhus University and the VisitAarhus Convention Bureau on planning any event in the city and, thanks to these practices, the city gained spot in the 'Top 100' on the highly recognized ranking by the International Congress & Convention Association (ICCA).

Find out more at: https://www.visitaarhus.dk/sites/visitaarhusconvention.com/files/2019-10/The-Green-Conference-and-Event-Handbook.pdf

**Sustainable attractions; Aarhus:** Cultural sites and festivals can act as catalysts for sustainable development when bringing people together around big and small experiences. The 'Aarhus Sustainability Model' for sustainable development includes a guide and examples to bring sustainability into a European context across the cultural



© Giorgio Bombieri Comune di Venezia

sectors. For example, NorthSide, Denmark's most sustainable festival, takes place in Aarhus, and the organisers of the event have ensured green solutions for everything, from food and dealing with waste to power supply based on 100% green electricity. The festival's sustainability programme 'Lead the Way' governs decisions about procurement, investment, collaborators, interior design, resource management, transport, charity and the supply of organic food and beverages throughout the festival. Likewise, Aarhus' Moesgaard Museum is one of the world's most energy-efficient museums, built with sustainability in mind from the start, including building materials and an optimal use of daylight, decreasing overall energy consumption and water waste. The green roof of the museum contributes to decreasing the energy consumption of the building and reduces the overall need for cooling due to decreased heat absorption.

Find out more d sat: https://www.yumpu.com/en/document/read/55220233/aarhus-sustainability-model

**A guide for more sustainable business and events; Copenhagen:** Meet Copenhagen City assists professional international delegates to plan their study program and match the delegations with relevant partners and experts. To help organizers and businesses host more sustainable large conferences, meetings and events in Copenhagen, Wonderful Copenhagen has developed a digital Sustainability Guide that lists all the sustainable options with 6 planning areas: travel & transportation, venues & accommodation, materials & communication, food & beverages, socially responsible partnerships and lasting impacts.

Find out more at: https://www.wonderfulcopenhagen.com/convention-bureau/sustainable-events/start-planning-your-sustainable-event

**The Ocean Race Project; Genoa:** The Ocean Race is an epic adventure in which the world's top sailing teams circumnavigate the planet powered only by the wind. While the first Ocean Race in Europe has arrived in Genoa in June 2021, the Grand Final and the project 'Racing with Purpose' will take place in 2023. The sustainability programme brings together a range of tangible ways that will positively impact the marine environment such as rolling out initiatives for cleaner, healthier seas and a learning programme. Genoa as host city makes use of the Ocean Race by contributing vital scientific data to aid the understanding of ocean health and the effects of climate change by using our race boats to collect valuable data on

sea surface temperature and ocean acidification. Moreover, the city will ensure that every element of the race village is sustainably produced: from being free of single-use plastic to the seafood served on site and invite people who visit the events to help protect the ocean. In overall, the city will use the Ocean Race Summits series as an occasion to change the way people behave towards the ocean for good. It will therefore host innovation workshops for sailing clubs and offer learning programmes for adults and schoolchildren about the issues affecting the ocean. When in June 2021 the Ocean Race arrived in Genoa, the whole race village was powered by 100% renewable energy and the Race was climate positive, supported by blue carbon projects. This will inspire others to act on climate change.

Find out more at: https://www.visitgenoa.it/en/evento/genova-will-host-finish-ocean-race-europe

**'Art Kamp' festival as an example of Zero Waste Events; Maribor:** The family festival Art Kamp takes place every summer in the Maribor City Park. Since 2017, the organizers of the festival are committed to a vision: a festival without waste that is achieved with the help of the national Zero waste organization for Slovenia - Ecologists without Borders. In 2019, the organizers managed to collect 93 percent of waste separately and at the same time halve the total amount. Thanks to the implemented measures, the Art Kamp has become one of the two Slovenian "zero waste" events, which are considered an example of good practice both at home and abroad. It is also planned that other events will also join the zero-waste events initiative, such as the Ceremonial Harvest of the World's Oldest Vine and St. Martin's Day in Maribor.

Find out more at: https://www.visitmaribor.si/en/discover/maribor-green-destination/ and https://www.visitmaribor.si/en/what-to-do/events-and-shows/calendar-of-events/5951-

### 4.2.1.6 Sustainable urban planning; Dubrovnik; Gdynia; Florence; Helsingborg; Rotterdam; València

**SEADRION PROJECT; Dubrovnik:** Emissions related to energy used for heating and cooling of buildings can be significantly reduced with technologies which use renewable energy sources and have high efficiency. Taking this into consideration, the SEADRION project aims to support the development of a regional innovation system for the Adriatic-Ionian area with the installation of 3 renewable energy facilities in the public buildings located

in Greece and western and south part of Adriatic Croatia, one of them in Dubrovnik. This project pursues fostering diffusion of heating & cooling technologies using the seawater pump in the Adriatic-Ionian Region. As part of DURA's project "Seadrion" co-financed by the European Program for International Cooperation, Interreg ADRION 2014-2020, the existing technical heating and cooling system in the Rector's Palace was replaced.

Find out more at: https://seadrion.adrioninterreg.eu/?fbclid=IwAR3Ui6N7JbIsrmUTKi2Y6UtnzQMZ4uCCPKI5oq0iH8Bq7DSA973iL6Rj7jE

**CLIMATic City Centre for the improvement of public spaces; Gdynia:** Gdynia is running an innovative project called CLIMATic City Centre that aims to improve the quality of public spaces, particularly for pedestrians and cyclists, for a greener environment. As it is pursuing climate neutrality, Gdynia has increased green areas in the heart of the city. And it has taken several measures to reach that goal: It has designed new infrastructure to change transportation habits that will limit and change the direction of car traffic and it has rearranged its parking system. Additional bicycle lanes were installed and sidewalks available for pedestrians were widened. Gdynia has also created tree lines and pocket parks that are being constantly developed.

Find out more at: https://sea-city.pl/gdynia-takes-care-of-the-environment/

**Be.Long project; Florence:** The Be.Long project addresses foreign and offsite students, smart workers, start uppers, temporary residents and seeks to engender a sense of "belonging" to the city. The project aims to repopulate the historic centre with the next generation of residents and medium- to long-term rentals. The initiative will also act as a data gathering exercise to monitor the long-term rental market in the city centre. Although overseas students form a considerable segment of the target audience, the platform has also been conceived as a tool applicable to start-up workers and temporary citizens/workers who come to the city for a finite length of time. It is also aimed at smart workers and digital nomads, became more relevant with the Covid-19. Surveys suggest that the possibilities afforded by remote working have prompted 37% of the world's workforce to consider moving location. Destination Florence is keen to promote Florence as a smart destination for these new mobile breeds of employee.

Find out more at: https://belong.destinationflorence.com/en/

**The project "Street moves": Encouraging interaction; Helsingborg:** In an ever more densely populated city, public space is becoming increasingly important. With the help of interactive construction kits like "Street moves", Helsingborg is testing different solutions and transforming a street by creating space for more varied activities like playgrounds, outdoor gyms, plant cultivation. Simultaneously, the project brings more life to a street by enabling the formation of social meeting points. More and more people, forgoing cars and choosing alternative transport methods, give the city greater room to explore how the streets of the future might look like. This idea is being tested right now on a street in Helsingborg where space has been set aside for seating, bike parking, greenery and lighting. This creates a new urban landscape putting people at its centre which in the long run encourages interaction between residents and visitors and creates an even more



© Martin Sörbo

authentic experience that visitors want from a destination. The project is a collaboration between the Vinnova project Street Moves, Helsingborg municipality and Arkdes.

Find out more at: https://innovation.helsingborg.se/initiativ/street-moves/

**Rotterdam is discovering new sustainable spaces within its urban centre; Rotterdam:** Through the Rotterdam Roof Days festival, everyone can admire the city from a new perspective: flat roofs. These flat roofs are a new urban space that the city is looking at to create new accessible and attractive space within the city centre as a sustainable alternative to creating new building and help increase breathing space and urban recreational areas within an increasingly crowded city.

© Frank Hanswijk (Rotterdamse Daken Dagen), city of Rotterdam

Find out more at: https://rotterdamsedakendagen.nl/en/

**Repurposing riverbeds into new urban spaces for residence and tourists; Valencia:** The city of València has a strong proven track record of integrating sustainable urban planning. The Turia Gardens offer some examples of the city of València strengthening their ecological ties to the natural resources and the integration of old natural structures into their urban planning. The old Turia Gardens is one of the largest urban parks in Spain spanning 9km of green footpaths, leisure and sports areas as well as paths suitable for cyclists. Built



© Visit Valencia

on the old riverbed of the river Turia which was diverted to prevent flooding, the Turia Gardens offer a prime example of integrating natural resources into the urban planning of a city. By doing so the city has created a sustainable alternative and green areas for local flora to grow and provide shade as well as open, green leisure areas for the residents and visitors alike.

Find out more at: https://www.visitvalencia.com/en/what-to-do-valencia/nature-in-valencia/parks-and-gardens-valencia/turia-gardens

**4.2.1.7 Sustainable water cycle; Karlsruhe**

**Majolika factory mugs and Refill program for more climate friendliness; Karlsruhe:** The Majolika manufactory is supporting the city in reducing waste of material like disposable coffee cups by designing trendy porcelain vessels or mugs – at the same time the products are supposed to shine as iconic objects of identification or souvenirs. Karlsruhe's drinking water – whether from wells or from the tap in hotels - has also been made available in a 100% climate-neutral way since 2018. More than 50 volunteer retailers also participate in the Refill program by offering visitors free refills of drinking vessels they bring with them with tap water.

Find out more at: https://majolika-karlsruhe.de/en/

**4.2.1.8 Tourism taxation; Palma**

**How taxation can lower the carbon footprint of tourism; Palma:** In order to incorporate the tourism sector and its effect on climate change the city of Palma as part of the Balearic Islands has begun enforcing a "sustainable tourism tax" on its visitors. The tax is the used to protect and preserve the Islands natural resources as well as invest in scientific research, training, and employment, especially in Palam. By including the visitor in the solution of the carbon footprint generated by the tourism sector is an inclusive way of sharing the responsibility of helping nature in a tourist destination.

Find out more at: http://www.ecotasa.es

## 4.2.2 Preserving and enhancing the natural environment

**4.2.2.1 Natural preservation; Dublin; Maribor; Athens; Palma; València; Venice**

**UNESCO Dublin Bay Biosphere, Where People and Nature Connect; Dublin:** Dublin city is home to the Dublin Bay Biosphere which has a unique UNESCO designation, as it is the only Biosphere Reserve worldwide which includes within its area a national capital city. It recognises the biodiversity of the area, as well as the economic, cultural and tourism importance of this biodiversity, and the need for an ecologically sustainable economic model for the Biosphere.  The Biosphere was expanded in 2015, now covering the whole of Dublin Bay, extending to over 300km2. Over 300,000 people live within this newly enlarged Biosphere. The buffer zone comprises 82km2 of public and private green spaces such as parks, greenbelts, and golf courses, which surround and adjoin the core zones. The transition zone comprises 173km2 and forms the outer part of the Biosphere. It includes tourism hot spots, residential areas, harbours, ports, and industrial and commercial areas. The Biosphere has three main goals: conservation, which focuses on promoting the conservation of landscapes, habitats, wildlife, and cultural values; learning, which emphasizes supporting education and research for a better understanding of nature and global issues, and development, which aims to fostering a sustainable economy and society for people living and working in the area. It operates important programmes to help foster economic and environmental sustainability. To build on this success, the partnership has developed a five-year Conservation Programme, a five-year Research Strategy, a three-year Business Development Plan and an Education and Awareness Programme. Within the Dublin Bay Biosphere, which includes three Blue Flag beaches, are exceptional recreation areas for both Dubliners and tourists alike. Visitors who use wheelchairs can now access these amenities due to the introduction of special 'beach wheelchairs' which are available free of charge at North Bull Island and Dollymount Strand. For visitors, another popular way to explore the biosphere is on the award-winning Biosphere Discovery Tour which is run by Dublin Bay Cruises. Furthermore, 1600 Dublin bikes and explore the Biosphere on Dublin's newest Coastal Mobility Route, which comprises over 3.6km of cycling and walking path along Dublin's coastline which was opened in 2020. Since opening, the Coastal Mobility Route has become an important sustainable transport corridor for Dublin which helps to spread our visitors more sustainably throughout the city. The route is also fitted with smart sensors to measure its usage. Its success has transformed how people get around Dublin, with over 20,000 cycle trips being recorded every week, a 100% increase since 2019.

© Frank Hanswijk (Rotterdamse Daken Dagen), city of Rotterdam

Find out more at: https://www.dublinbaybiosphere.ie

**Green labels for the city – Old Vine House; Maribor:** The Maribor Tourist Board in cooperation with local partners decided to apply Maribor as the green destination of Slovenia and has come up with a detailed action plan with laid-out environmental goals. One of the institutions implementing the action plan and serving as a green label example is the Old Vine House that in 2020 was awarded the Green Key ecolabel by the National office in Slovenia. For obtaining the certificate, the provider must meet 13 criteria of evaluation, ranging from environmental management, guest information, waste and water management, energy efficiency to staff engagement and other criteria. In 2021, the Old Vine House was also awarded the Slovenia Green Attraction logo.

Find out more at: https://kongres-magazine.eu/2020/10/old-vine-house-maribor-awarded-the-green-key-eco-label-certificate/ and https://www.visitmaribor.si/en/what-to-do/wine-and-culinary/old-vine-house/

**Adopt a tree, help Athens stay green, Athens:** Every year, Athens plants approximately 600 trees that need watering 3-4 times per week so that they survive, but 10%-40% of these trees die because of high temperatures. The city has begun to invest in proper maintenance of trees to protect them from weather events and to increase their environmental benefits. Athens created a map with the participation of residents that shows the coordinates of all the city's trees and their characteristics to help design the most efficient and effective ways of maintaining the trees. Additionally, the Adopt-a-Tree program helps residents keep a schedule of when trees are watered to help them survive. Through the Novoville app, people can find a tree and commit to keeping it healthy by watering it.



© City of Athens

Learn more about 'Adopt a Tree' initiative here https://novoville.com/adopt-a-tree/

**Green Corridor Reforestation; Palma:** To mitigate and adapt to climate change by reducing CO2 emissions and their effects, Palma has instigated a campaign to reforest their urban landscape and has installed prominent signage containing live, real time updated information with how many trees have been planted to date. Together with the Green Corridor project, the city aims to help the recovery of green areas in the urban city centre as well as help combat the effects of climate change namely rising temperatures by offering a natural cooling of the city through the regeneration of the trees in Palma.

Find out more at: https://www.majorcadailybulletin.com/news/local/2016/12/27/46432/green-corridor-for-temperature-reduction-planned-for-palma.html

**Coastline sustainability at the center of responsible maritime tourism; Valencia:** València participates in the MITOMED project, a project that aims to improve the development of sustainable and responsible coastal and maritime tourism in the Mediterranean and is based on the following actions: Developing a system of tourism data indicators to measure the sustainability of tourism activities and their social and economic results and impacts; Promoting social dialogue between stakeholders; Creating the Green Beach model, a tool for local authorities and beach operators that helps them make decisions about the sustainable management of beaches; Developing an integrated management model of coastal and maritime tourism.



© Visit Palma

Find out more at: https://fundacion.visitvalencia.com/en/sustainability/projects/mitomed

**How to prevent flooding in a sustainable manner; Venice:** The MOSE system that has been implemented may at first glance appear to be a smart solution to a particularly Venetian problem, but it can have application across Europe and the world. To protect the city of Venice the unique architectural and environmental heritage the Experimental Electromechanical Module (MOSE System) operates to protect the city from high water and from the tides. The system can protect Venice and the



© Renato Greco Comune di Venezia

lagoon from tides up to 3 meters high and from a sea-level rise up to 60cm expected in the next century. The MOSE flood gate was raised in 2020 and since then, Venice has no longer suffered flooding from tides exceeding 110cm.

Find out more at: https://www.mosevenezia.eu/project/?lang=en

**4.2.2.2 Sustainable education; Dublin; Alba Iulia; Copenhagen; Matosinhos; San Sebastian**

**Encouraging ecological values among the little ones; Dublin:** During the Covid 19 lockdown, the Dublin Bay Biosphere used remote technology to run a HomeSchool Biodiversity Series, and community programmes that encourage children from across the city to become Biosphere ambassadors. In June 2021, Dublin Bay Biosphere in partnership with Scouting Ireland launched the Dublin Bay Biosphere Award. This allows children to earn a badge which can be sown onto uniforms or clothing in recognition of their efforts to protect local wildlife.

Find out more at: https://www.dublinbaybiosphere.ie/events/home-school-webinar-series/ and https://www.dublinbaybiosphere.ie/biosphere-award/about-the-biosphere-award/



© Fiona McDonald

**Discovering nature through augmented reality; Dublin:** The Dublin Bay Biosphere actively uses smart technology to promote sustainability. Sensing Ecologies is an augmented reality app developed by the Biosphere and artist Fiona McDonald as part of a public art project. The app senses where the user is and builds wildlife soundscapes around them. Voiceovers and interviews are also included which educate the user on both wildlife and the effects of climate change. This year they will install solar powered signage, water bathing monitoring sensors, and they will also use drones in collaboration with GIS systems to map and survey wildlife ecosystems.

Find out more at: http://www.fionamcdonald.digital/sensing-ecology

**The Urban Garden; Alba Iulia:** The Urban Garden initiative is part of the Metamorphosis Project in Alba Iulia. It aims to create a network of urban gardens around schools and kindergartens within the city where children and teachers can promote urban gardening and can use the gardens as a learning space. The urban gardens were developed within the neighbourhoods. This way schools and citizens could "adopt" their own plot to take care of. Several events such as a seeds-exchange-event, a recycling workshop, a cooking workshop, and a painting workshop took place and expanded the urban gardening idea.

Find out more at: https://metamorphosis-project.eu/sites/default/files/downloads/Fact%20 Sheets%20Alba%20Iulia.pdf

**Developing the city through the eyes of tourists & citizens; Copenhagen:** Copenhagen is Denmark's largest student city: their energy, wealth of ideas and contribution to the community, make Copenhagen a vibrant and lively and the students are invited to contribute to development of the city. In March 2021, the City of Copenhagen, the University of Copenhagen's sustainability lab and Wonderful Copenhagen hosted the Copenhagen Sustainability Challenge. In the 24-hour case-challenge, students from 19 different nationalities and 10 universities came together to solve challenges concerning the development of sustainable tourism in Copenhagen and the Greater Copenhagen area with a special emphasis on green tourism mobility and sustainable behaviour. The results of the case- challenge presented a variety of exiting ideas concerning the development of sustainable tourism, that the city of Copenhagen will consider going forward.

Find out more at: https://actory.dk/en/case-challenge/

**Sustainable choices for a sustainable stay; Copenhagen:** With a humorous approach, the "Sustainable Copenhagen" campaign seeks to motivate Copenhagen's visitors to take care of the city and make sustainable choices during their stay. The campaign consists of 10 simple tips and tricks on how to make 'little changes for a big impact'. The campaign encourages visitors to travel by bike or to use public transport, drink tap water and reuse water bottles, eat locally, shop sustainably and get off the beaten track.

Find out more at: https://www.wonderfulcopenhagen.com/convention-bureau/copenhagen/sustainable-copenhagen

**Horta à Porta for a better quality of life; Matosinhos:** Promoting the population's quality of life through good agricultural practices is what the initiative Horta à Porta aims for. This project does not only encourage the creation of dynamic green spaces, but also promotes increased contact with nature and healthy habits without forgetting the reduction of waste. Horta à Porta also introduces organic farming as a form of production in which neither insecticides nor fertilizers are used, facilitating the creation of a balanced ecosystem.

Find out more at: https://www.cm-matosinhos.pt/servicos-municipais/ambiente/horta-a-porta

**A sustainable guide to the city; San Sebastian:** San Sebastian has created a guide designed to help visitors contribute to the sustainability of the destination and the city. By



© Donostia San Sebastian Turismoa

inviting its visitors to read the "My Guide to be a Donostiarra (True Local)", San Sebastian is inviting the locals to participate in keeping the city a sustainable destination and ensuring that the responsibility for this is a shared commitment by all. The guide comprises 6 best practices for visitors to follow while they are staying in or visiting the city and range from inviting visitors to learning the langue with some quick and easy phrases to encouraging the use of public transport while in San Sebastian.

Find out more at: https://www.sansebastianturismoa.eus/en/come/quality-destination

**4.2.2.3 Sustainable shopping; Maribor; Szczecin; Genoa**

**Zero waste shopping policy by 'Zelena Japka'; Maribor:** Zelena Japka (Green Japka) store is the first store without plastic packaging and a zero-waste store in Maribor. Opened in 2019, it is the first store operating under the brand Kupujem odgovorno which raises consumer awareness and encourages them to make socially responsible purchases. Zelena Japka offers a range of carefully selected products that are friendly to humans, animals and nature. In addition to being free of plastic packaging, the products and raw materials are distinguished by the fact that they are organic, produced on the principle of fair trade, are free of palm oil, do not contain animal products and are not tested on animals.

Find out more at:: https://www.visitmaribor.si/en/discover/maribor-green-destination/ and https://www.visitmaribor.si/si/informacije/druge-informacije/10101-

**Local Branding for global recognition; Szczecin:** Since 2018, the brand "Made in Szczecin" has been awarded by the City of Szczecin to the original products or services that show high quality while portraying the city in a positive light and are produced or offered by the business owners from the Szczecin Metropolitan Area. The brands goals are as follow: Promoting creative, economic, pro-investment and innovative projects in Szczecin; Strengthening Szczecin's identity and building a positive image of the city and the tourist brand; Strengthening Szczecin's image as an attractive tourist destination; Increasing in the quality of products and services offered in Szczecin; Promoting the city, as well as its entrepreneurs and institutions; Increasing in the loyalty of customers, both citizens and tourists, to local products and services.

Find out more at: https://www.madeinszczecin.pl

**GenovaJeans Project; Genoa:** "GenovaJeans. Invented here!" is a project that perfectly represents the spirit with which Genoa wants to celebrate the origins of the most widespread fabric in the world and build a bridge to its sustainable future. Genoa therefore offers Jeans Made in Italy as a platform for designing and testing good practices of sustainable production and for involving the public in a quality process that guides consumers towards responsible choices. Starting from 2021, GenovaJeans is an annual event with which the city intends to enhance its firstborn products and to link Jeans Made in Italy to sustainable innovation. The event will mark the birth of the Via del Jeans in a touristic, commercial, cultural tour aimed at enhancing the streets (via Pre', via del Campo, via San Luca) where the fabric has been produced and used since ancient time. The goal is also to promote the role of Genoa and Italy in the birth and development of the most popular garment in the word which at the same time is an icon of pop culture.

Find out more at: www.genovajeans.it

### 4.2.3 Spreading the flow of tourists

**4.2.3.1 Spreading the flow through technology; Florence**

**Infomobility Florence APP- Platform; Florence:** Infomobility Florence (IF) is a service platform dedicated to integrated urban mobility management. It gives real time information on mobility services, including public transport real time arrivals, parking slots and charging station availability, access limitation to certain areas of the city, changes of circulation rules due to accidents, roadworks, etc. IF is also used by the city to promote sustainable transport options.

Find out more at: https://www.omnys.com/en/news/florence-province-infomobility

**Sustainable Urban Mobility Plan (SUMP); Florence:** The Sustainable Urban Mobility Plan (SUMP) has led to significant investments into Florence's public transport network and is currently implementing a wide communication campaign for eco-friendly behaviours. For instance, Firenze Walking campaign promotes walking as a mobility alternative to reduce the congestion of mass tourism. The IF app – Infomobility Firenze – also encourages

sustainable mobility by offering the users alternative solutions and making them aware of the carbon footprint of their transport choices, while rewarding them for behavioural changes in favour of more sustainable solutions.

Find out more at: https://fsr.eui.eu/publications/?handle=1814/68840

### 4.2.3.2 Spreading the flow through urban planning; Porto

**Decentralisation at the heart of tourism; Porto:** In order to relieve pressure of high demand areas and facilities Porto has, as a part of its municipal master plan, promoted the dispersion of tourist flows and the creation of new centralities as well as stimulating the extension of stays. The decentralisation of tourism accommodation is encouraged by municipal regulations, and creation of new accessibilities and requalification of infrastructures have also had a pollinating effect, attracted new investors, and contributed to physical, economic, and social regeneration of these areas. Dispersion of fairs and markets has also created new poles of interest and attractiveness, reducing socio-spatial asymmetries.

Find out more at: https://www.investporto.pt/en/news/porto-city-council-approves-new-municipal-master-plan/

### 4.2.3.3 Spreading the flow with transportation; Bordeaux; Copenhagen; Dubrovnik

**A destination that strikes a balance; Bordeaux:** Bordeaux aims to maintain a balance, such as the equilibrium found between the city's urbanised zones and natural spaces. This balance, sustained through the promotional activities of the Bordeaux Convention Bureau (BCB), avoids a bottleneck effect in terms of in-season tourist presence. Business travellers mainly come to Bordeaux in June, November and March (according to 2015-2018 statistics). Natural pathways are central to the city's tourism strategy,

© Céline Faure

with the inauguration of the first 'Metropolitain GR' (Grande Randonnée) in France (160 km, 17 cities), in addition to the many footpaths and cycle routes that already exist around Bordeaux.

Find out more at: https://www.bordeaux-tourism.co.uk/nature/leisure/long-hiking-trail-accessible-tram

**Smart travel plan; Copenhagen:** In addition, the digital route planning service 'Rejseplanen' (the Travel Plan) that guides travellers from A to B on their itinerary, now includes not only public transportation, but also services such as city bikes, city cars and ridesharing, which are displayed in those areas where the services are available.

Find out more at: https://www.rejseplanen.dk/webapp/?language=en_EN#!P|TP!histId|0!histKey|H662483

**Electric marine transport; Dubrovnik:** This initiative of establishing public electric maritime transport on the territory of the city of Dubrovnik will enable the coastal communication and dispersion of passengers by sea, as well as unburdening of land roads and bottlenecks in both directions (east and west), and partly the inbound and outbound city traffic. This will enable the creation of integrated multimodal links and ensure sustainable local mobility while increasing capacity and the use of public transport.

Find out more at: https://econautinet.adrioninterreg.eu/news/the-electrification-of-maritime-transport-in-the-adrion-region

## 4.3 BEST PRACTICES IN DIGITALISATION

### 4.3.1 Facilitating information for specific target groups

**4.3.1.1 Introducing Alipay to attract chinse tourists; Ljubljana**

**The Tourist Information Centre in Ljubljana** has adopted the Alipay payment option. It is a popular digital payment method in China and its introduction aims to raise the profile of Ljubljana as a destination adaptable to visitor's needs. It makes it easier for locals as well as visitors from China to pay in a more convenient for them way.

Find out more at: https://www.ljubljana.si/en/news/tic-and-stic-as-the-first-payment-points-for-the-alipay-app-in-slovenia/

**4.3.1.2 Expanding the visitors' market with the Toorbee app; Athens**

**Whereas the official visitors' guide "This is Athens"** is published in English, French, and German to target the largest markets for tourism in Athens, it is true that there is also growth potential to attract visitors from China. Consequently, the City of Athens and the Athens Traders' Association partnered to launch the Toorbee app, a B2B platform that aims to bridge the gap between Athenian travel supply and Chinese travel demand. The app provides information on sight-seeing, hotels, shops, and restaurants to Chinese Online Travel Agencies while letting Athenian service providers create their own content for better targeting, higher conversion rates, and instant payments.

Find out more at: https://www.toorbee.com/28-12-2018-athens-airport-launches-new-app-for-chinese-tourists/

### 4.3.2 Collecting information for smarter management

**4.3.2.1 Smart control rooms; Florence; Venice**

**Florence:** The Florence Smart City Control Room aggregates and shares data among the Florence Municipality, public utilities and public service providers in a common data platform

and enables policy-making decisions for an increasingly responsive city. In addition, an open data platform with 1859 datasets is available, one of the most active open portals in Italy. In the case of tourism, FeelFlorence is an example of ICT tool based on data analysis to enhance the city as Smart Destination. The observed views on the Control Room are related to mobility and transport, parking status, cultural offer, KPIs of government services, etc.

Find out more at:  https://www.snap4city.org/drupal/node/531

**Venice:** The city of Venice has equipped itself with a Smart Control Room (SCR), an integrated control room which gives the city's administration the ability to monitor the city's mobility, gather data and intervene promptly and prevent any incidents from occurring. This is particularly important to monitor tourist flows in real time and to help direct and divert streams accordingly to mitigate the effects of crowds, over tourism and help in the case of emergencies with quicker reaction times. By centralising several existing operating systems, for public transport, the SCR provides a unique and centralised system by which the city can control and manage the present by giving a comprehensive overview and planning for the future through the data collected.

Find out more at: https://www.venis.it/index.php/it/node/1048



© Comune di Venezia

**Traffic monitoring and management; Marbella:** The city of Marbella has facilitated E-surveillance and application of ICT for traffic monitoring and management. Marbella has an information platform that provides real-time information on different resources, to which citizens and companies have free access to certain layers of information. This is the Territorial Information System of Marbella (SITMA).

Find out more at: http://sit.marbella.es/VISOR_SITMA/

**4.3.2.2 Park smarter; Athens; Dubrovnik**

**Easier public parking; Athens:** The City of Athens developed its own mobile app to control public parking. The "myAthensPass" is accessible to visitors and residents, making it easy to pay for parking straight from a mobile device. The app offers municipal police the ability to manage and control all available parking spots in the municipality's road network.

Find out more at: http://www.parkinathens.gr and https://appadvice.com/app/myathenspass/1152368547

**Find a parking spot online; Dubrovnik:** About 1900 sensors were installed in Dubrovnik with the aim of finding a free parking space and reducing traffic jams. Given the number of sensors and the fact that they are installed throughout Dubrovnik, it is one of the largest integrated smart parking solutions implemented on the Narrowband Internet of Things network worldwide. For drivers to be able to see which parking space is free at any time, and therefore plan where they could park, a special application for mobile devices has been created and is available to everyone, both the citizens of Dubrovnik and tourists. This saves drivers time looking for a free parking space and reduces congestion caused in large part by drivers circling the streets in search of an available space to
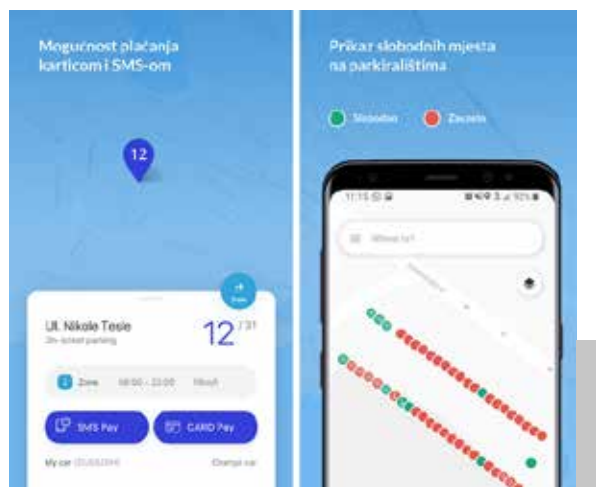


© Dubrovnik Parking

park. In some places in the city, a system of twenty public information displays has been set up to enable those citizens who do not use the application to see the free parking spaces a few streets earlier and to be able to see which place is available in time.

Find out more at: https://hrturizam.hr/en/u-dubrovniku-pokrenut-jedinstven-sustav-pametnog-parkiranja/

**'Dublinked'; Dublin:** Dublin's National Open Data Strategy 2017-2022 encourages public bodies to make data available for everyone. Thus, its open data platform called 'Dublinked' hosts over 300 data sets, including many tourism databases that are used to build better tourism experiences by managing data feeds in digital city kiosks so visitors can navigate the city better. Additionally, open data challenges are run, and teams are invited to build helpful city solutions using open travel data sets.

Find out more at: https://www.dublincity.ie/business/economic-development-and-enterprise/smart-cities/dublinked

**4.3.2.3 EData collection and sharing for a better tourism experience; Aarhus; Dubrovnik; Rotterdam; València; Florence**

**'Sustainable urban innovation; Aarhus:** With the aim of creating sustainable solutions, 'Smart Aarhus' is an initiative developed in order to create sustainable urban innovation and growth; a model based on involving stakeholders through partnerships. The city is a pioneer of smart city technologies such as using cutting-edge sensor technology to tackle peak traffic and reduce fuel consumption. The experiments and the 'Smart City'-solutions are carried out by the Aarhus City Lab, which connects citizens behaviour with digital measurements, and by using data it makes the city more citizen-friendly. The primary focuses are mobility, parking, waste, digital art & culture, events, exhibitions, interactive installations, incentives for exercise and much more. This innovative approach earned the municipality of Aarhus a prize of 10.000 EUR in 2018 as 'Runner-up' at The European Capital of Innovation (iCapital) Awards, an annual European Union recognition prize awarded to the European cities that best promote innovation.

More about "Smart Aarhus" at: https://smartaarhuseu.aarhus.dk/about-smart-aarhus/

SmartTourismCapital.eu     #EUTourismCapital

**Dubrovnik Visitors; Dubrovnik:** The Dubrovnik Visitors service enables the city authorities to monitor the number of people that is currently in the Old Town in the City of Dubrovnik. It gives data about the number of people that entered to the city and based on that information the city authorities can make smarter and more informed decisions concerning the organisation of pedestrian movement around and inside of the Old Town.

Find out more at: https://dubrovnik-visitors.hr

**Data collection at the heart of getting to the airport; Rotterdam:** 'Mobility as a Service' (MaaS) is a digital service for people travelling to and from the airport, which combines all mobility options and provides the best travel options (even in the middle of the night, when most travel apps no longer offer options). It is a direct result of the Twin City Project and a great advantage for visitors to the city.

Find out more at: https://mrdh.nl/project/mobility-service

**Sharing tourism data with stake-holders; València:** The city of València offers interested partners and stakeholder a comprehensive and detailed overview of the data is gathers as part of its Tourism Intelligence System (SIT). From passenger demand over the offer and demand of accommodation to the frequency of air traffic in and out of València, the SIT offers a truly detailed insight into the tourism industry of the city. The database is continuously updated and gives potential partners as well as existing partners and stakeholders an opportunity to optimise their offers according to the relevant data.

Find out more at: https://www.visitvalencia.com/en/sit


© Visit Valencia

**HERIT-DATA project; Florence:** The city of Florence is also one of the pilot sites of the HERIT-DATA project. The key objective is to develop and test a new management system and AI tools through the collection of existing, and generation of complementary, data (Big Data, Open Data, IoT, data provided through sensors, local systems & cameras, etc.). The treatment of inputs (data) from citizens, visitors, companies, public administrations, and the sites themselves will bring benefits to different stakeholders from an improved quality of life to information for better decision-making.

Read more about HERIT-Data here https://herit-data.interreg-med.eu

### 4.3.3 Physical and psychological accessibility through innovation

**4.3.3.1 Accessing museums digitally; Braga; Izmir; Padua**

**Braga:** In the context of the "Braga Digital" initiative, the municipality defined a specific programme for supporting the creation of new infrastructures in the museums (physical and virtual). Particular attention is devoted to the historic-cultural contents by means of virtual reconstructions, simulations, animations, as well as the publication of real images from each site. The initiative covers the following museums: the Image Museum, the "Escola da se" archaeological site, the "Alto da Cividade" archaeological site, the Idol fountain archaeological site. The Dom Diogo de Sousa and Biscainhos museums will be featured on a dedicated web portal, presenting relevant information for visitors, who want to prepare their visit or go deeper into the information about the museum's contents.

Find out more at: https://ccg.pt/my-product/braga-digital/?lang=en

Izmir: The sanalmuze.gov.tr website has made it possible for interested visitors to virtually access cultural and art activities. Due to the COVID-19 pandemic causing difficulties to experience museums in-person, digital innovations on culture and art now allow locals and tourists to partake in virtual tours in the city's museums. People can have a 360-degree virtual tour of the entire museums and click around to get information about historical background information.

Find out more at: www.sanalmuze.gov.tr

**Padua:** The web portal of the museums of Padua constitutes a modern, digital solution that gathers in one place the museum's offering for the public. The web portal (MeB) displays the collections, artworks and main features of each museum in Padua. The new web portal plays an important part in the future of digitalisation of museums and the touristic offerings that they allow. This tool represents an important information, research and promotion tool for Padua and those who are interested in its steep history.

Find out more at: https://padovamusei.it/it/collezioni-meb

### 4.3.3.2 Apps to experience history or sights; Athens; Alba Iulia; Bordeaux; Ljubljana; Copenhagen

**A city exploration game; Athens:** "Narratologies" is a location-based app offering alternative, self-guided city exploration and shopping tours. The app creates a hybrid experience of urban cultural exploration by utilizing gamification techniques combined with location intelligence. The app guides visitors independently and at their own pace around the city while exploring hidden stories and acquiring unique rewards from local businesses, providing the user with an exciting way to experience Athens off the beaten track.

Find out more at: https://narratologies.com/

**Exploring like a game; Alba Iulia:** The QUESTO app is a self-guided interactive tours app that helps tourists discover the Alba Iulia by solving quests in a creative way. Thanks to the Questo app, visitors can play a very interesting city hunt inside the Alba Carolina Citadel and around the city.

Find out more at: https://www.youtube.com/watch?v=VnW2112yE6M&t=1s

**Treasure hunts; Bordeaux:** Terra Aventura is a family treasure hunt that takes place all over the Nouvelle-Aquitaine region via a mobile app. The game is proposing 400 fun and unusual routes throughout the region, providing users with an opportunity to discover the natural and cultural heritage of many different places. With its significant community of players, Terra Aventura is a fantastic way to encourage users to explore little-frequented

places. The tourist office made the choice in 2018 not to create a trail through Bordeaux city centre, despite significant demand. Conscious of the future success of the Terra Aventura trails, the Bordeaux Tourist office created one in the commune of Lormont in 2018 and in Gradignan in 2019: places that have a rich heritage but are rarely visited compared to the UNESCO-listed Bordeaux city centre.

Learn more about Terra Aventura here https://www.terra-aventura.fr/en

**Audio city guide 'Nexto app'; Ljubljana:** The Nexto app is an innovative smart audio city guide that enhances the tourist experience. The app actively engages its users through features like puzzles, riddles and item collection by mobile scanning. With the help of AR, it creates engaging game-like learning experiences and contains interactive maps. It gives added value to sightseeing and uses location-aware technology for activating audio guidance.

Find out more at: https://www.museum.de/videos-detail/o3buhu8isv0 and https://play.google.com/store/apps/details?id=io.nexto&hl=de&gl=US
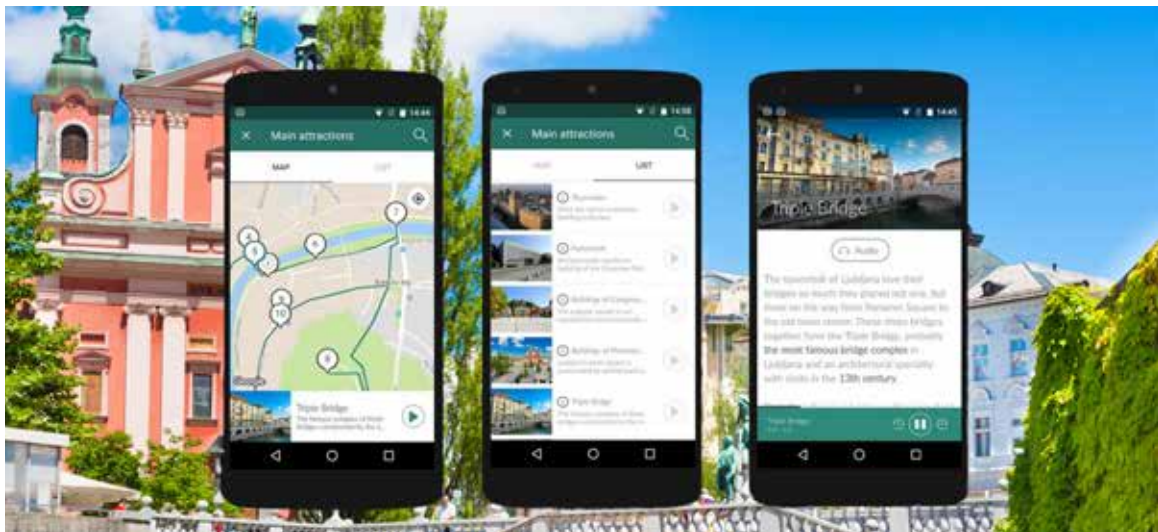


© Grafika

**Digital tools for a sustainable visit; Copenhagen:** Planet CPH is an app that aims to inspire visitors to Copenhagen to more sustainable behaviour. Planet CPH is a location-based app that presents the user with two types: Sustainable "points of interest" (POIs) nearby complete with all relevant information and directions. In addition, the app contains inspiring guides with video and text with various sustainable themes (for example cycling). The app highlights high quality experiences that are sustainable in one or more categories for sustainability: environmental (biking possibilities, clean harbor areas for swimming, public water posts, sustainable food as well as attractions working to implement sustainable measures in the visitor experience); social (green and urban areas that hold possibilities for locals and visitors to meet and share a moment of culture or dining, as well as organizations with altruistic activities); and economical (small shops with locally produced goods).

Find out more at: https://www.visitcopenhagen.dk/koebenhavn/diverse/om-planet-cph
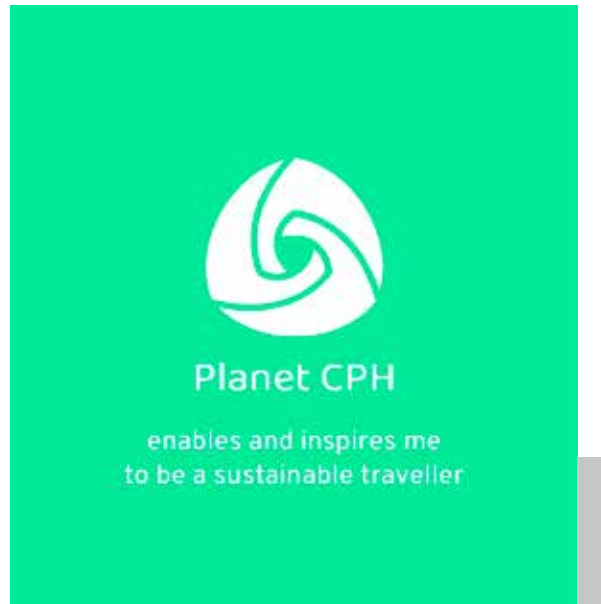
**4.3.3.3 Promoting local tourism; Porto; Bordeaux**

**Supporting local goods and business; Porto:** By launching the initiative "Shop in Porto" the municipality has created a digital platform which is dedicated exclusively to traditional street commerce and promotes the visibility and attractiveness. The platform gathers information's about all the shops, its products, locations and promotes in force allowing the creation of personalised itineraries. To date, 1,600 traders have allowing for a comprehensive overview of the locally source and traditional commercial street vendors of Porto. In doing so, the city has digitalised and modernized a traditionally non-digital aspect of its commercial scene.

Find out more at: https://www.porto.pt/en/video-clip/shopinporto-en

**A webzine that promotes local tourism; Bordeaux:** The webzine 'Un air de Bordeaux' highlights the actors, events and places that make up Bordeaux's natural and cultural wealth and emphasises the strong sense of local identity. Designed by and for the residents, the webzine is also appreciated by visitors who are looking to step away from the beaten trail. It is full of ideas for local, responsible weekend trips and encourages the reader to leave their comfort zone to make local tourism interesting and desirable. Launched in 2017, it has become a local brand, with more than 400 articles published, 30,000 visitors per month and a weekly newsletter sent to 15,000 subscribers.

© Un Air de Bordeaux

Find out more at: https://www.unairdebordeaux.fr

### 4.3.3.4 A digital Bauhaus; Karlsruhe

**The ZKM Center for Art and Media based in Karlsruhe,** with more than 30 years of work, is considered a "digital Bauhaus" of the 21st century. It is a cultural institution of all media and genres, whether space- or time-based and belongs to the world's most important cultural institutions listed by ArtFacts.net, the world's largest art database which ranked the ZKM behind international giants like MOMA in New York or the Centre Pompidou in Paris. The ZKM Center and media art in general have a strong appeal in superregional marketing. Media art is one aspect that the city focuses on and is proud of. Karlsruhe was named Germany's first UNESCO City of Media Arts in 2020 since it presents digital and analog art a tangible experience in public spaces for locals and visitors, for example through the annual Seasons of Media Arts festival.

Find out more at: https://zkm.de/en and https://www.cityofmediaarts.de/

**4.3.3.5 AR and VR experiences; València; Copenhagen; Dublin**

**Visualise art with AR; València:** The Fallas festival, an annual traditional celebration in the city of València, has offered the city the opportunity to partner with the University Research Institute on Robotics and Information and Communication Technologies (IRTIC) and the Engineering Technical School of the Universitat de València (ETSE-UV) to create an augmented reality application. This augmented reality allows users to interact with the ninot  painting of the artist Ramón Solaz, which can be visited at the Ninot Exhibition. The ninot symbolises a neuron which forms part of a virtual brain. The user can explore it through the mobile application to obtain information about the latest discoveries on the field of neuroscience. The augmented reality application can be installed on numerous operating systems and can identify several types of neurons.

Find out more at: https://www.uv.es/uvweb/engineering/en/etse-uv-news/augmented-reality-fallas-neuroscience-1285923366775/Novetat.html?id=1286033492616

**Locals' Guide to Copenhagen:** In the Copenhagen Visitor Service centre, visitors can experience the city through soundscapes, VR-experience and more, before exploring the city for themselves. Visitors can immerse themselves with a VR- bicycle experience in the visitor centre, learning how to navigate the streets of Copenhagen on a bike and what to be aware of. Copenhagen Visitor Service also have a digital guide – Copenhagen Visitor Guide – with selected recommendations for attractions, museums, eateries, shopping etc. which can be accessed in the visitor centre, and on several local tourist information centres in city – and of course on smartphones.

Find out more at: https://www.facebook.com/vrpro.dk/videos/927144760774187/

**Digital Trail Toolkit; Dublin:** The Smart Tourism Programme for Dublin, supported by Dublin City Council, Fáilte Ireland and Imaginear have developed a Digital Trail Toolkit, designed to help identify best practice for destinations and businesses who wish to develop digital trails. The Digital Trail Toolkit is a step-by-step guide to assist industry in Digital Trail App development. Although there are many different types of app and digital trail developments in the tourism industry, there are few examples of toolkits developed specifically for organisations who are interested in building their own digital trail. The

purpose of the Toolkit is to help identify best practice examples of digital trails and create a path to development for destinations and businesses who wish to develop digital trails.

Find out more at: https://smartdublin.ie/smart-tourism-digital-trail/?utm_source=rss&utm_medium=rss&utm_campaign=smart-tourism-digital-trail

### 4.3.3.6 Attracting digital nomads; Dubrovnik

**The city of Dubrovnik** has launched its first digital nomad-in-residence (DN-I-R) programme to help make the city attractive as a long-term base for people who have the freedom to work from anywhere. Through a joint programme between the City of Dubrovnik and its Tourist Board, operated by the remote workspace and events company Saltwater Nomads, ten digital nomads with a wide social media influence were selected via an application process to stay in Dubrovnik free for a month. During that time, alongside their usual work they attended design thinking workshops to provide input on the city's strategic and sustainable direction in which the city should move and adapt to COVID-19 challenges.

Find out more at: https://www.total-croatia-news.com/digital-nomads-in-croatia/53143-nomad-partners

### 4.3.3.7 Artificial intelligence initiatives; Gdynia; Karlsruhe

**A 'Virtual Clerk' to help you out; Gdynia:** In 2015, Gdynia has become the first Polish city to introduce solutions enabling convenient and friendly contact with customers via Virtual Clerk. It is fully designed and implemented by the staff of the Gdynia City Hall and works based on an artificial intelligence mechanism that understands the question and immediately finds an answer or forwards it to the place where the answer is to be found. The Virtual Clerk is well adapted to the needs of the residents and the city by offering residents multi-channel communication and by including everyone. The accessibility of the virtual clerk also encourages people with restrictions to use this intelligent communication tool.

Find out more at: https://innovationinpolitics.eu/showroom/project/residents-account-gdynia-e-services-centre/

**Discovering through augmented reality; Karlsruhe:** The "Stadtgeist Karlsruhe" app is an augmented history app that revives stories of, with and around Karlsruhe and makes exciting audio and video contributions available free of charge by collaborating with the city archive. The app is considered as a national pioneer and won the German AppCampus Award in 2013 and was implemented as part of the SmarterCity initiative in Karsruhe.

Find out more at: http://www.stadtgeist-karlsruhe.de/

**4.3.3.8 Providing real time info; Helsingborg; Palma; Matosinhos; Porto**

**Bus stops turned into info points; Porto:** 'Explore Porto' has enabled public transport to become interactive for residents and visitors to the city of Porto. By installing NFC and QR code technology in the form of beacons at bus stops, visitors can access information on points of interest and routes at various bus stops through the city. In doing so, the city is actively integrating bus stops into the tourism experience and encouraging visitors to become users of digital innovation.

Find out more at: https://explore.porto.pt



© Filipa Brito / CM Porto

**Smart lifebuoys for safer beaches; Helsingborg:** Feeling safe during bathing is an important factor in attracting people to the beaches and this is what Helsingborg's smart lifebuoys are contributing to. Helsingborg is the first city in the world with lifebuoys that, with the help of magnetic sensors, automatically sound an alarm when they are removed from their holders. The magnetic sensors alert the authorities straight away whenever a buoy is removed, which allows them to quickly replace it. This creates safer bathing experiences for residents and visitors and also helps to save lives.

Find out more at: https://innovation.helsingborg.se/en/initiative/smart-lifebuoys-make-be-beach-walks-safer/

**Avoiding overcrowded and congested beaches; Palma:** The "Platages Secures" or Safe Beaches app is an app that shows how crowded beaches in Palma are in real time, as well as lists the current and active safety measures that are in force. The app shows different occupancy levels that showcase how full a beach is at any given time allowing for less congestion and for the visitors to plan their trip to the beach in advance.

Find out more at: https://apps.apple.com/us/app/id1522274113 and https://play.google.com/store/apps/details?id=com.playas.palma&hl=en&gl=US



© Majorca Beaches

**Look for the "Tomis" tablets around the city; Matosinhos:** Categorized as "street furniture" with a stylish and innovative design, the "Tomis" are "giant tablets" in public spaces and provide locals and visitors with all necessary information. These devices are installed in Matosinhos and Leça da Palmeira and operate 24 hours a day. "Tomis" respond to the immediate needs of dwelling business and provide information about the area's attractions and offers. These interactive panels of information are a cultural information source as they deliver culinary, heritage and effective assistance with unlimited features and constant updates. The tablets/displays allow a reliable, tailored and personalised experience to all those who ask and look for something different in the city – including where to find the world's best fish.



Find out more at:   https://www.leca-palmeira.com/tomis-torna-turismo-em-matosinhos/ https://www.matosinhoswbf.pt/pages/356

**4.3.3.9 Use that bitcoin; Ljubljana**

**Located in Ljubljana,** the BTC Company, along with the AV Living Lab company, created the BTC City one of the largest shopping centres in Europe, as a lab test environment: an ecosystem of more than 3000 companies, developing advanced mobility, a digital park, an ABC accelerator twice awarded with the CESA award for best accelerator programme. BTC company not only provides the possibility of sharing electric vehicles in the area but also the option of paying with bitcoin, thus making Ljubljana the first bitcoin city in the world.

Find out more at: https://www.visitljubljana.com/de/poi/btc-city/

### 4.3.3.10 Light installations bring literature to life; Ravenna

**As part of the celebration of Dante Alighieri's 700th death anniversary,** the city of Ravenna has installed a light art installation called La Luce delle Parole (Words of Light). This art installation has enlightened six streets of the city centre with fifteen verses from the Divine Comedy, outlining a bright path along the city's porticoes and buildings. The installation delivers a message of hope, wishing that we will soon "see-once more-the stars" (from Dante's Inferno XXXIV, 139). By scanning a QR using your mobile phone you can walk through this poetic atmosphere while listening to the original lines which are located under each initialisation.

Find out more at: https://www.turismo.ra.it/en/events/other-events/la-luce-delle-parole-2/



© Luca Concas

### 4.3.3.11 Digital Twin City; Rotterdam

**Smart meters which signal waste,** resulting in the outdoor space remaining tidy and hospitable, street lighting which is only lit in places where people are present, or smart parking systems, so visitors don't need to trawl through the entire city looking for a parking space. A tool which makes all these applications possible is the Digital Twin City project, for which a full 3D model of the city has been made, brimming with open data which is accessible to everyone. By making this data more accessible to all, the city has become an open and innovative space in which private enterprises can become involved in shaping the city more effectively.

Find out more at: https://smart-cities-marketplace.ec.europa.eu/news-and-events/news/2019/rotterdams-digital-twin-redefines-our-physical-digital-social-worlds



**Dynamics Open Urban Platform**
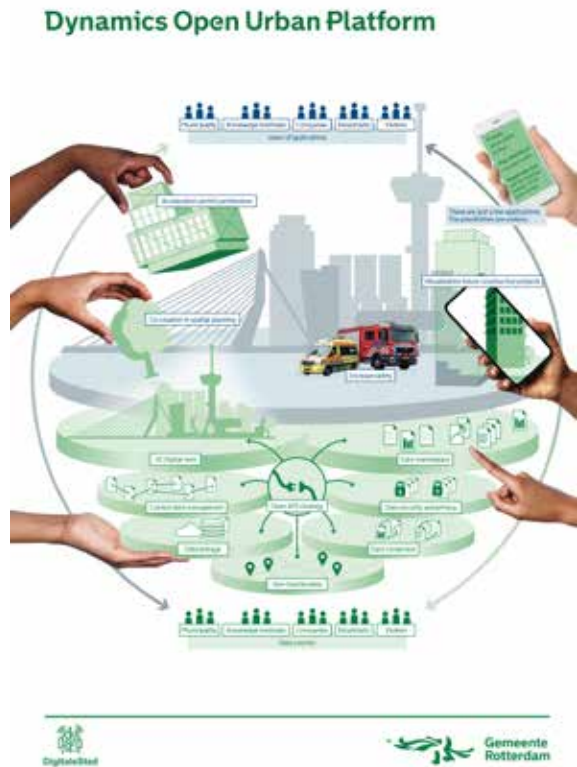
© City of Rotterdam

## 4.4 BEST PRACTICES IN CULTURAL HERITAGE AND CREATIVITY

### 4.4.1 Reviving traditions and cultural heritage sustainably

**4.4.1.1 City walks with a creative touch; Bordeaux**

**The 'Bordeaux nous envoie balader'** initiative began with two objectives: support tour guides who were heavily impacted by the pandemic and spark local interest in the city's heritage, all at a reduced price. 1000 free tours were given in the first year and 1200 at a reduced price in the programme's second year. The rich and surprising programme (30 different themes proposed) has debunked the dusty old image of classic guided tours and shown the creativity of tour guides, attracting a new audience, notably a young audience who may previously have been less intrested .

Find out more at: https://www.visiter-bordeaux.com/en/taxonomy/term/98

**4.4.1.2 A glimpse into a genius' mind; Copenhagen**

**'BIG dock' is the new permanent exhibition** of the Maritime Museum of Denmark in Copenhagen, which gives visitors the opportunity to get close to the star architect Bjarke Ingels' thoughts, visions and creative process about the creation of the already iconic underground museum building that houses M/S Maritime Museum of Denmark. In the exhibition the story is told by Bjarke Ingels himself – through films, statements, models and one of his favourite media: the comic book. Here he uncovers, among other things, why he deliberately chose to break the competition rules and instead wrap the museum around the dock – and the magic that arises when a historic industrial monument – the dry



© Daniel Rasmussen

dock – is revived through modern ground-breaking architecture. The museum created a virtual reality film showing the architectural process of the construction of the museum which located partly underground at an old dock in the harbour of Helsingør.

Find out more at: https://mfs.dk/en/exhibition/big-dock/

### 4.4.1.3 Recovery of cultural heritage; Alba Iulia

**The Alba Carolina Citadel in Alba Iulia** is the largest fortress in Romania, which has been standing for more than 300 years, however, it harbours vestiges of three fortifications, dating back to as many different epochs, as every fortress built here has embraced a previous one: the Roman castrum, the medieval fortress and the Alba Carolina Citadel. This fortress has seen spectacular transformations in recent years, becoming more and more visible on Europe's tourist map. The restoration works (co-financed by European funds) have also considered to valorise its exceptional cultural heritage. Now the citadel is an open-air stage for cultural festivals and concerts held by famous orchestra top Romanian and foreign artists. Additionally, the municipality has developed promotion and marketing tools based on new technologies: digital campaigns to promote innovative tourism offers, physical and digital maps of the Citadel, virtual guides in Principia Museum, VR tours in the Citadel, among others.

Find out more at:  https://ec.europa.eu/regional_policy/en/projects/romania/rehabilitation-of-alba-iulias-urban-heritage-transforms-the-city-and-its-economy

### 4.4.1.4 A cultural platform for all: Copenhagen

**The Lousiana Museum of Modern Art** located in Copenhagen was nominated by the network 'Leading Culture Destination' for best digital museum experience with the 'Louisiana Channel'. It is a non-profit website based at the Louisiana Museum of Modern Art in Humlebæk, Denmark. With Louisiana Channel as a platform, Louisiana supplies culture to the Net that extends beyond the museum's own events. The Louisiana team produces videos about art and culture on an ongoing basis, and new videos are posted every week. The platform was launched in 2012 and consists today of more than 875 videos about art and culture, free and accessible to all.

Find out more at: https://channel.louisiana.dk/

**4.4.1.5 Innovative and creative offer exploiting synergies; Dubrovnik**

**FUTURE EPICS is one of the programmes,** financed by European commission with the innovative view on exposing immaterial heritage to Dubrovnik Festival's guests. FUTURE EPICS brings together a combination of production, theatre, dance, sociocultural organisations with a common goal to rediscover certain aspects of European cultural heritage with an accent on empowerment of young artists and audience.

Find out more at: https://futurepics.org/future-epics-lab-scenography-in-heritage-held-from-11th-to-14th-march-in-dubrovnik/

**4.4.1.6 A riverside fortress; Gaziantep**

**The pearl of Gaziantep, Rumkale,** was once a riverside fortress on the Euphrates, today the fortress sits on the side of a small lake this is due to the dam that was built on the river. It is of great importance and displays the city's cultural heritage. As one of its most important projects, the glass terrace that is still under construction will serve the nature and cultural heritage of Rumkale in the most valuable way. Additionally, the glass terrace project is about to become Turkey's largest and most prestigious project after its completion in 2021 and will bring a new energy to Gaziantep's tourism and dynamism-loving tourists. Getting to Rumkale, the natural wonder of Gaziantep, is very easy. Excursions and transportation are provided in addition to boats within the Rumkale castle.

Find out more at: https://www.alaturkaturkey.com/destinations/rumkale.html

**4.4.1.7 Museums as digital pioneers; Karlsruhe**

**Interactive exhibitions,** digital audio guides for smartphones or exhibits you can touch make Karlsruhe and its museums pioneers of innovation, especially in the field of digitalization. In the past five years, the annual number of visitors to Karlsruhe's museums has risen to almost 920,000, more than 435,000 people were guests at the 20-plus theaters in 2019, and another 250,000 at the numerous socio-cultural event spaces. The 2015 festival summer, for instance, celebrating the city's 300th birthday demonstrably increased arrivals and overnight stays by more than 12%. With KAMUNA, Karlsruhe has had one of the oldest municipal museum nights for over 20 years. During the pandemic, the cultural

location exhibited its creative resources and, within a very short time, managed to launch interactive apps, digital tours and streaming concerts even after the closure. Karlsruhe's institutions actively promoted the development of new cultural programs right from the beginning of the closure due to the pandemic.

Find out more at: https://youtu.be/F9S8IloDklo

**4.4.1.8 Lazareti – Creative hub of Dubrovnik; Dubrovnik**

**Since the 14th century Lazareti building complex** was established as the first quarantine in Europe where anyone who wanted to enter Dubrovnik needed to stay for 40 days beforehand. The complex has since served many purposes and is now being revived as a common ground for different cultural content for the local community and the tourists as part of the 'Lazareti Creative Hub of Dubrovnik' project. Through this venture segments of the Lazareti complex were renovated and equipped for cultural-touristic programmes. Special interest was put on environment care by implementing LED lights in the Lazareti complex, and the building venues were adjusted to people with disabilities, whereas tourist guides were educated how to guide them. The general aim of the project is the improvement of cultural heritage management through valorisation the cultural heritage venues and spreading the cultural-touristic offer based on the cultural heritage of Dubrovnik.

Find out more at: https://lazaretihub.com/en/press-releases/lazareti-once-and-today

**4.4.1.9 An inclusive Emigration Museum; Gdynia**

**In 2015, the Emigration Museum** opened in the historic building of the Marine Station. It is the first museum in the country that is dedicated to the history of Polish emigration. The permanent exhibition tells the story of the departure and fate of Polish people around the world in the past and in close connection with the present day. Through the stories of Polish women and men, visitors get a chance to learn about the history of the city from where Polish transatlantic ships sailed for decades. The museum has an inclusive character as it provides a free offer tailored to the needs of people with disabilities or special needs.

Find out more at: https://polska1.pl/en/home/

## 4.4.2 Communal infrastructures

### 4.4.2.1 A wine tasting pass; Bordeaux

**As the 4th most-visited museum outside of central Paris,** La Cité du Vin is a unique place, revealing all the cultural wealth and diversity found in wine. Using a "tour companion", set off on an immersive, multi-sensory journey all around the world. To promote the site locally and turn residents into ambassadors, the entry fee has been reduced for the whole summer for Bordeaux residents. The largest wine tourism event in Europe is organised by the Bordeaux Tourist Office. The success of this operation is built upon the Tasting Pass, an RFID card which allows attendees to enjoy 12 tastings from the 80 different appellations present on-site at pop-up wine bars along the waterfront. The pass also includes entry to an 'initiation to tasting' workshop at the Bordeaux Wine School, all providing an opportunity to discover the diversity found among Bordeaux wines.

Find out more at: https://www.bordeaux-wine-festival.com/wine/tasting-pass/users-guide.html



© Loïc Graniczny

### 4.4.2.2 Dubrovnik Summer Festival; Dubrovnik

**The bustling walled city of Dubrovnik** hosts its spectacular and one of the oldest European festivals that annually, for 47 summer days, presents rich and vibrant theatre, dance, opera, classical music, jazz, visual arts, film and folklore programme. The Dubrovnik Summer Festival is recognised as one of Europe's most distinguished cultural festivals. Relying on the City's and its own rich and living heritage, the festival continues to promote its site-specific policy, combine tradition and modernity, and connect local, national and international creativity. The festivals' catalogue, during the seven decades of existence, comprises more than 120 various venues, which covers almost the entire city and the sea surrounding it, resulting in a unique bond between the city and the festival.

Find out more at: https://www.dubrovnik-festival.hr/en/

### 4.4.2.3 Theatre on the beach; Gdynia

**The Witold Gombrowicz Municipal Theatre** is a long-appreciated theatre stage in Gdynia. It is distinguished from all the other Polish theaters by offering a unique stage located on the beach. During summer, visitors and tourists can enjoy performances with the sea in the background, overlooking the majestic cliff coastline which is an extremely popular scenery. In addition, some of the theatre's plays during summer are presented on board of the Dar Pomorza, a more than 100-year-old sailing ship that is permanently moored at Gdynia's waterfront.

Find out more at: https://pomorskie.travel/en/punkty-poi/teatr-miejski-im-witolda-gombrowicza-w-gdyni/ and https://www.mystorygdynia.pl/en/attractions-details-page-344320?RecordID=184930

### 4.4.2.4 A creative city for media arts; Braga

**Braga boasts some consolidated budgets** as a city of culture with a recognition as a UNESCO Creative City of Media Arts. This project began in 2017 and provided some momentum for culture and creativity in the city, not only in terms of activities and cultural expression, but also in terms of creation and redevelopment of cultural spaces and hubs, plus promotion of gatherings to share experiences. The City of Media Arts has essentially operated out of two "houses" - gnration and the Theatro Circo - and has also helped to

revitalise these spaces. The cultural centre gnration is a space for creation, performance, and exhibition in the field of contemporary music and the relationship between art and technology. By adopting a sustained strategy, always open to the community, it intends to confirm its status as a unifying pole for cultural and creative dynamics, making it a space oriented towards educating and raising awareness in a new audience, demonstrating artistic practices relevant from a contemporary and cosmopolitan perspective. The cultural schedule of gnration is founded on two fundamental pillars, which can be viewed independently or jointly. Contemporary music and the relationship between art and technology are central to the programme, whether the profile is performance, exhibition, or education. Also operating inside this space is Startup Braga, a corporate incubator which seeks to foster and encourage entrepreneurship in the city and has the municipality's support. Today, the Theatro Circo is a really dynamic cultural broadcasting centre, time and again exceeding the target of 100,000 spectators to become a geographical hub.

Find out more at: https://www.bragamediaarts.com/en/braga-and-media-arts/

**4.4.2.5 Caravan tourism on the rise; Gaziantep**

**Caravan tourism and camping in and around Gaziantep** have become increasingly popular since the start of the pandemic. The municipality, which has made an important breakthrough in this area, ensured that the city is safe for caravan tourism. The caravan parking lot and residential area, one of the city's most important projects implemented during the pandemic, provide safe and enjoyable travel opportunities for all – domestic as well as foreign visitors. This situation has directed the route of the visitors towards the Southeast of Turkey to Gaziantep in order to enjoy caravan tourism activities there. Not only do visitors enjoy a tourist attraction that can operate despite the pandemic, but also the local community can benefit from the visitors.

Find out more at: http://www.gateofturkey.com/section/en/259/4/tourism-types-congress-tourism-gaziantep

**4.4.2.6 Altice Forum Braga; Braga**

**Inspired by the Roman heritage of Minho's capital,** Altice Forum Braga is a multi-purpose structure, dedicated to exhibitions, congresses and other events of a socio-cultural, scientific, recreational and sports nature as well all kinds of recreational and

entertainment shows. The Altice Forum Braga is the result of the complete redevelopment of the former Braga Exhibition Park and has become a flagship venue in the North of the country.

Find out more at: https://www.forumbraga.com

### 4.4.2.7 Culture Near You; Dublin

**Dublin local authorities** take open data one step further by creating the 'Culture Near You' map. It was identified that for Dubliners, visitors and city planners, there was no central source of information about culture in the city. The project has culturally mapped Dublin city and provides city planners dynamic cultural information as they make strategic decisions about Dublin's future. 'Culture Near You' uncovers the diverse cultural activities of the city and makes them widely available to residents and visitors. There are currently over 3,500 cultural assets on the map and infinite possibilities for that number to increase. The impact of this project has been enormous. It gives everyone the opportunity to find hidden gems nestled in Dublin neighbourhoods and gives visitors the opportunity to experience the city from a local and community perspective.

Find out more at: https://www.dublincity.ie/culturenearyou/#

### 4.4.2.8 Urban Mediaspace Aarhus; Aarhus

**The Urban Mediaspace Aarhus project** has transformed the industrial port environment into a new and lively city environment, creating a dynamic correlation between the city-centre and the waterfront. The comprehensive project includes the iconic DOKK1, which is Denmark's largest library and an international trendsetter for future library environments. Though physically close to the city-centre, the area was previously inaccessible to the public; but has now turned into a creative and social hub, and the space is designed to attract visitors all day round.

Find out more at: http://www.urbanmediaspace.dk/sites/default/files/pdf/uk_ums_haefte_2015.pdf

### 4.4.2.8 Experiencing Athens like a local; Athens

**'This is Athens with a Local'** is an open platform that helps visitors to connect with a community of local volunteers so that they can learn from each other during a walk around the volunteers' neighbourhoods, discovering hidden treasures and places they won't find in any tourist guides. It is part of the official Visitor's Guide to the City 'This is Athens'.

Find out more at: https://www.thisisathens.org/withalocal/node/2

### 4.4.2.9 Cross-Border City Walks, Szczecin

**A large part of Szczecin's cultural heritage** is shared across the German-Polish border. As with many cities through the Europe, shifting borders have resulted in cultural heritage being often the part of two nations as in the case of Szczecin. To address this and include it within the city's promotion and touristic offerings, Szczecin has created the Cross-Border City Walks project which promotes activities to support and promote the integration the citizens across the border area within the Pomeranian Euroregion.



© Visit Szczecin

The purpose of the walks is primarily to strengthen relations and to develop the sense of identity of the citizens of the region and the sense of belonging to a cross-border society.

Find out more at: https://visitszczecin.eu/pl/kultura/125-transgraniczne-spacery-miejskie-plde

### 4.4.3. Usage of cultural heritage for new creativity

**4.4.3.1 Old becomes new; Bordeaux; Dubrovnik; Dublin; San Sebastian**

**Do better with less; Bordeaux:** Such is the essence of the Darwin Ecosystem, a collective geared towards a green economy, now one of the most visited sites in Bordeaux. This former military barracks is home to an urban farm, the largest organic restaurant in France, plus its organic delicatessen, all showing a way of "consuming differently". It's a place of diversity and innovation where you can find skateparks, an open-air gallery for graffiti artists, as well as co-working spaces and entrepreneurs working in the green economy. The place is also committed to welcoming refugees and hosts a second-hand boutique.

Find out more at: https://www.bordeaux-tourism.co.uk/sites-monuments/darwin-alternative-and-inspiring-urban-ecosystem



© Sara Soulignac

**The other side of history; Dubrovnik:** "The other side of History" project is based on heritage interpretation. It introduces visitors to the social and historical atmosphere of the 18th century Dubrovnik Republic. Considering that the Dubrovnik Museums own a rare historical instrument-fortepiano built by Viennese builder Anton Walter in 1790, the project contains specialised costumed performance on period instruments with storytelling.

The aim of this project is not just to present and highlight the values and richness of both tangible and non-tangible cultural heritage, but to also immerse visitors into the special historical environment of a reconstructed event in the Rector's Palace. Therefore, Concert by the Rector's which is implemented as an additional cultural- touristic programme of Dubrovnik Museums offers live performances in the presence of the Rector himself who is the host to the event. Performed both in Croatian and English, it brings the story of the life of composers whose works are performed as well as the history of the Dubrovnik noble families and their relations to European cultural centres of the time. Listening to the music performed on the original period instrument, accompanied by the degustation of the preferred sweet of the Dubrovnik nobility, the visitors are becoming a part of an exclusive cultural event which connects musical performance with its socio-cultural context.

Find out more at: https://www.dumus.hr/en/

**EPIC; Dublin:** EPIC is a high-tech visitor attraction housed in the brick vaults of the CHQ Building, a beautiful historic warehouse in Dublin's Docklands. In this museum Irish history has become a dynamic, immersive experience, rather than a long list of names and dates. Thus, here visitors can explore Irish culture and history in a fully interactive way with touch screen video galleries, motion sensor quizzes, remastered audio from 100 years ago, a 'whispering' literature gallery and engaging films. The museum



© EPIC The Irish Emigration Museum

is arranged in 20 galleries where it explores the reasons people emigrated and celebrates their impact across the globe. EPIC's digital storytelling is a sustainable model of exhibition making, allowing the museum to be updated with new stories or recent social changes in Ireland, such as marriage equality. As committed as it is to being an open and accessible museum, it has an app in multiple languages that can be used to assist the wider museum experience.

Find out more at: https://epicchq.com



© EPIC The Irish Emigration Museum

**A transformed lighthouse; San Sebastian:** For many years, the Lighthouse of the Santa Klara Island in San Sebastian has been empty and abandoned. Inspired by the wild nature of the island, so close to the city and by the outstanding geology of the Basque country coast, the sculptor Cristina Iglesias, has produced works that transform the interior of the Lighthouse, restoring it and converting it into a startling sculptural place.

Find out more at: https://www.donostia.eus/ataria/es/web/hondalea/home

**Transforming an industrial port into a residential hub; Bordeaux:** 20 years ago, the quays of Bordeaux were an empty shell of an old commercial port that had been moved downstream. With the regeneration of the waterfront came river tourism. The forty-odd cruise ships that docked in the heart of the city in 2019 bear testament to the success of this new industry for Bordeaux, as do the river cruise operators offering wine cruises departing from Bordeaux. Bordeaux is tackling the sensitive subject of the environmental impact of the industry and is committed to preserving its environment. The port adopted a demanding environmental cruise ship charter in December 2019. The city is also making its four-river cruise ship landing stages "electric-ready", introducing waste collection and sewage collection via barge.

Find out more at: https://www.bordeaux-port.fr/en/discover-port

### 4.4.3.2 The Modernism route; Gdynia

**The Modernist Centre of Gdynia,** a port city located on the Baltic Sea, is unique as a heritage site of European town planning and architecture in which the ideals of Modernism have been confronted with the changing needs of a growing city and port, in consequence creating a place with a clearly modern character but at the same time without any doctrinaire traits. It is a typical starting point for tourist routes that make up the Gdynia Modernism Route. Gdynia Modernism provides excellent examples of industrial, port and residential buildings, including villas, but also the silhouettes of streamlined blocks, bringing to mind the ship architecture. 450 modernist buildings are currently included in the Gdynia Modernism Route. The buildings open their doors during cyclical events including the 'Open House Gdynia', 'the Weekend of Architecture' or the 'Modernism in Gdynia – Modernism in Europe' conferences.

Find out more at: https://whc.unesco.org/en/tentativelists/6431/

### 4.4.3.3 Open-air museum; Helsingborg

**The Fredriksdal,** built at the end of the 18th century, was donated to Helsingborg municipality in 1918. It comprises a cultural centre that contains Helsingborg Museums' collection, a theatre and an educational organisation that is important for the preservation of the city's living culture. This open-air museum is the largest of its kind in Sweden and offers an exceptional space for nature and culture to mix. The mansion, its parks and

gardens are surrounded by the houses and land of the Scanian countryside, city scenes with buildings from central Helsingborg, and a botanical garden with Skåne's wild foliage. Locals as well as visitors have the chance to learn more about the city's living culture.

Find out more at: https://fredriksdal.se



© Anders Ebefeldt

**4.4.3.4 A chatbot giving guided tours; Copenhagen**

**The National Museum of Copenhagen** has developed a chatbot to help guests to a smooth experience and give an overview of the many possibilities that the museum offers. The chatbot gives answers to not only to FAQs and helps with the practical needs, but also offers an interactive and digital guided tour of some of the most popular themes in the expositions and give visual information. The chatbot solution has been launched, tested, and adapted and the data shows that the chatbot is used both before and during the visit, and the digital tours are a quite a success.

Find out more at: https://en.natmus.dk/museums-and-palaces/the-national-museum-of-denmark/chatbot/



© National Museum of Denmark

**4.4.3.5 Making a museum at 14 Henrietta Street; Dublin**

**14 Henrietta Street in Dublin** is a museum of architectural and social history, as told through the walls of the building and the lives of the people who lived there. From the outset of its 10-year long journey in 2008 to rescue, stabilise and conserve the house, the work was informed through engagement with former residents alongside a model of cross-sectoral decision-making. Here stories and research met the perspective of architects, conservators, social historians, former residents, artists, and archivists. Additionally, in Spring 2021, 14 Henrietta Street was invited to participate in a European pilot project alongside museums such as Pompidou and Courtauld to use their software and data

loggers. These provided feedback support and support for the ongoing development of software in building conservation to reduce day to day environmental damage, preserve objects and protect the fabric of the building. Visitors receive a guided experience through the house with the stories told through our guides, poetry, digital archive films and stories. The building is the primary artefact in the collection, and first-hand memories and handed down stories from former residents and their families inform the tour and animate the building's curation. The museum's exhibits are also highly accessible with an induction point in each room to complement the audio-visual displays.

Find out more at: https://14henriettastreet.ie

**4.4.3.6 Les Bassins à Flot: the rise of a new tourist district; Bordeaux**

**Under the guidance of the urban architect Nicolas Michelin,** an industrial wasteland has become a multi-faceted site: a "melting port", a place of culture and revelry. In just a decade, everything has changed. Nowadays, the Bassins à Flot district is a shining example of how to transform an abandoned zone into a trendy area where places of culture, nightlife, residence, business, and shopping can sit harmoniously alongside one another. It also represents another success in terms of "balance"; the emergence of this new tourist district has contributed to spreading the flux of visitors over the city. For



© Sophie Duboscq

instance, Les Bassins de Lumières, the largest digital art centre in France, is housed in an old submarine base from the Second World War, plunging visitors into the works of Monet, Renoir, and Chagall. Similarly, Le Musée Mer Marine is another symbolic building to have emerged in the district, shining a light on the oceanic world and sailing, and the Cap Sciences popularises scientific culture for both adults and children. These cultural establishments live alongside open-air bars, restaurant boats, an indoor-market, venues for music and dance shows, plus nightlife hotspots that attract locals and visitors alike.

Find out more at: https://www.bordeaux-tourism.co.uk/district/bassins-flot-bacalan.html

### 4.4.3.7 Aarhus city of museums and gastronomy; Aarhus

**From the Den Gamle By (The Old Town),** an open-air museum dedicated to the urban history and culture in Denmark through three centuries, to the ARoS Museum of Art, which 'Rainbow Panorama' makes ARoS one of the most popular contemporary art museums in Scandinavia, the museums in Aarhus present history innovatively in a breath-taking architectural setting. Aahus is home to some of the most impressive and popular museums in Denmark, most of them located in beautiful surroundings overlooking the forest and the sea. Likewise, the city is known as a gastronomic powerhouse that in 2017 was awarded the permanent, honorary title of European Region of Gastronomy.

Find out more at: https://www.europeanregionofgastronomy.org/platform/central-denmark-region-2017/

### 4.4.3.8 Traditional techniques and contemporary expressions; Florence

**Officina Creativa** is a place combining creativity with tourism and tradition with innovation. In the spaces of the "Vecchio Conventino," in the heart of the Oltrarno, the artisans' neighbourhood, is the Officina Creativa, is located. A space devoted to handicrafts and to creative activities. Twenty artisans and artists who work with wood, decoration, sculpture, painting, grinding, iron casting, leather, printing, engravings and grindings, restauration, ceramics, gold and silver, eco sustainable design, weaving and many other areas of quality artistic handicrafts and art are based here. A unique space where the most traditional techniques live together with more contemporary expressions and of research in the world of design and of the art.

Find out more at: https://www.destinationflorence.com/en/details/829-officina-creativa-handicraft-in-florence

### 4.4.3.9 GenovaJeans; Genoa

**GenovaJeans** is an important example to improve the image of the city using cultural heritage and creativity to attract tourists. Genoa is working at very important projects that put together the great history of the city with a special capacity for technological and industrial innovation. GenovaJeans marks the birth of the street of Jeans, a touristic, commercial, cultural, itinerary aimed at enhacing the streets (via Pre', via del Campo, via San Luca) where the fabrics were produced and used since ancient times. The city wants to enhace its role and Italy in the birth and development of the most popular garment in the word, an icon of pop culture. The project is connected with Museum Diocesano and Museum Mazziniano to enhace them.

Find out more at: www.genovajeans.it

### 4.4.3.10 Outdoor Bathing Week; Helsingborg

**There is a strong tradition of outdoor bathing in Helsingborg,** stretching all the way back to the beginning of the 18th century. Helsingborg's municipality has introduced an event

© Lisa Wikstrand

called "Outdoor Bathing Week" to protect its cultural heritage, to preserve its tradition and to offer visitors an authentic experience. During this week, a programme with various activities is offered at three baths. They range from traditional outdoor bathing to the German sauna tradition of "aufguss" and lectures about Helsingborg's bathing traditions and cold-water bathing's benefits for the health of the body and soul. Helsingborg's ambition is to attract more and more visitors with the city's large number of outdoor baths and the growing trend of cold-water bathing together with the desire for authentic experiences.

Find out more at: https://visithelsingborg.com/kallbad/?lang=en

**4.4.3.11 VR and AR experiences for Plečnik's architectural works; Ljubljana**

T**he International Council on Monuments and Sites** has positively assessed Slovenia's bid to get selected works of architect Jože Plečnik (1872-1957) in Ljubljana included in UNESCO's World Heritage List. Since many of Plečnik's cultural heritage is not accessible to public, Ljubljana Tourism has started to digitalise Plečnik's heritage and make VR and AR experiences out of the digitalised materials. Additionally, Ljubljana has prepared a self-guided tour in the Nexto mobile app showing how the city would look like if Plečnik was able to complete major metropolitan projects that were never implemented. The digital content will be 3D modelling in AR and VR technology. The new tour will join Plečnik's Ljubljana cycling tour and Žale Cemetery Tour, both celebrating his architectural wonders.

Find out more at: https://whc.unesco.org/en/list/1643/ and https://www.visitljubljana.com/en/visitors/stories/take-the-bicycle-tour-through-plecniks-ljubljana/

**4.4.3.12 Connecting cuisine to culture; Ljubljana**

**The city has developed a promotional project called KulKul Moment** to make a city experience complete by combining culture and cuisine. This is a moment locals and visitors can only experience in Ljubljana. With stories that connect culture and cuisine, Ljubljana encourages people to visit cultural institutions and to find out the story behind the local culinary highlight in connection to culture. The city therefore published the first story in March 2021 about Emona slice and the visiting of Emona Park in Ljubljana aiming to increase the visibility of cultural institutions and works.

Find out more at: https://www.visitljubljana.com/en/visitors/explore/things-to-do/kulkul-trenutek/

**4.4.3.13 Digitalisation of the World's Oldest Vine; Maribor**

**One of the most important and essential parts of cultural heritage in Maribor** is the World's Oldest Vine by the Old Vine House that has started to implement VR experiences for visitors. The Old Vine virtual experience is an upgrade of the remarkable story of the 450-year-old vine. The VR headset transforms visitors into the Old Vine and takes them through time from 1570 to the present day. During this VR experience, visitors can also get to know important Maribor historical events, personalities and legends and observe the changes that took place on Lent over the centuries. The Old Vine House is located in the heart of the old city centre. The age of the "Žametovka" or "Modra Kavčina" vine is over 400 years and has won it a place in the Guinness Book of Records as the oldest noble grapevine in the world still bearing grapes. The Old Vine is a symbol of the rich wine culture of Maribor, Styria, and all of Slovenia. The house was built in the 16th century, and the south side of the House has seen no major architectural changes since then. Today, the Old Vine House is a temple of wine tradition and culture of Maribor, Styria, and Slovenia, offering guided tours of rich wine legacy and other museum exhibits.

Find out more at: https://www.visitmaribor.si/en/what-to-do/art-and-culture/ and https://www.visitmaribor.si/en/what-to-do/wine-and-culinary/old-vine-house/

**4.4.3.14 Transforming public transport into a sightseeing tour; Porto**

**Launched in February 2020, the "City Museum"** is a disruptive concept of modern museum pedagogy. Designed as a metro line, uniting 17 stations and interconnecting 5 thematic axes (sound, nature, material, liquid and romanticism), the "City Museum" has become a fascinating and new form of interactive museum experience. It incorporates archaeological sites, water places, historic houses, libraries, industrial spaces and offers an interesting, new, and innovative way of enhancing the museum concept.

Find out more at: https://www.porto.pt/en/news/the-city-museum-in-porto-is-reshaping-the-concept-of-city-integrated-culture

© Filipa Brito / CM Porto

### 4.4.3.15 Publicly accessible art storage facility; Rotterdam

**Depot Boijmans Van Beuningen** is the world's first publicly accessible art storage facility. The world-famous art collection at the Museum Boijmans Van Beuningen consists of more than 151,000 objects. The museum is home to Rotterdam's cultural heritage but with only 8% of its collect available to the public, the remaining 92% remain in storage. In order to break with this traditional policy of concealment that most museums around the world must adhere to due to space or other factors, the museum is making the compete collection visible to the public. By opening the first publicly accessible museum deport in the world, Rotterdam is ensuring that visitors will get an unobstructed behind the scenes view of the rest of the collection along with what goes into its preservation and maintenance of the artefacts and artworks on display.

Find out more at: https://www.boijmans.nl/en/depot

EUROPEAN CAPITAL
OF **SMART TOURISM**